aiwa

COMPACT DISC STEREO SYSTEM

NSX-S707

OPERATING INSTRUCTIONS

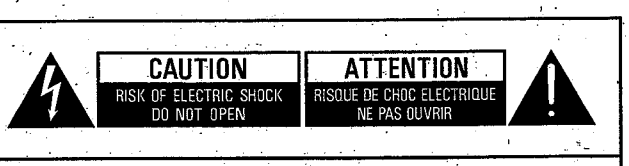
COMPACT disc DIGITAL AUDIO

88-NF6-905-01E
980320AMI-U-8-AWM

K

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



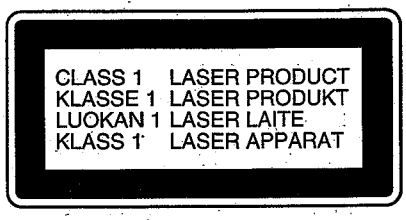
CAUTION

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

This compact disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the exterior.



CAUTION!

Invisible laser radiation when open and inter locks defeated. Avoid exposure to beam.

WARNING

This appliance is supplied with a fitted three pin mains plug. A 3 amp fuse is fitted in the plug.
Should the fuse need to be replaced, use a 3 amp fuse approved by ASTA or BSI to BS1362. When replacing the fuse, you must ensure that any removable fuse covers are correctly refitted.
If you should lose the fuse cover, please contact your nearest AIWA dealer.

DO NOT CUT OFF THE PLUG FROM THIS APPLIANCE. If the plug fitted is not suitable for the power points in your home, or the cable is too short to reach a power point, obtain an appropriate safety approved extension lead or adaptor. If in any doubt please consult a qualified electrician.

If the plug is cut off, remove the fuse and dispose of the plug immediately. **THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.**

If a new plug is to be fitted please ensure it contains a 3 amp fuse, otherwise the circuit should be protected by a 5 amp fuse at the distribution board.

IMPORTANT

The wires in the mains lead are coloured in accordance with the following code:

BLUE — NEUTRAL
BROWN — LIVE

As the colours of the wires in the mains lead of this appliance may not correspond with the colour markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked by the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked by the letter L or coloured RED.

DO NOT connect either the BLUE or BROWN wires in the mains lead to the earth terminal (marked with the letter E or by the earth symbol ⏚ or coloured GREEN or GREEN/YELLOW) of a three pin plug.

PRECAUTIONS

Read the Operating Instructions carefully and completely before operating the unit. Be sure to keep the Operating Instructions for future reference. All warnings and cautions in the Operating Instructions and on the unit should be strictly followed, as well as the safety suggestions below.

Installation

1 **Water and moisture** — Do not use this unit near water, such as near a bath, sink, swimming pool, or the like.
2 **Heat** — Do not use this unit near sources of heat, including heating vents, stoves, or other appliances that generate heat. It also should not be placed in temperatures less than 5°C (41°F) or greater than 35°C (95°F).
3 **Mounting surface** — Place the unit on a flat, even surface.
4 **Ventilation** — The unit should be situated with adequate space around it so that proper heat ventilation is assured. Allow 10 cm (4 in.) clearance from the rear and the top of the unit, and 5 cm (2 in.) from each side.
- Do not place the unit on a bed, rug, or similar surface that may block the ventilation openings.
- Do not install the unit in a bookcase, cabinet, or airtight rack where ventilation may be impeded.

5 **Objects and liquid entry** — Take care that objects or liquids do not get inside the unit through the ventilation openings.
6 **Carts and stands** — When placed or mounted on a stand or cart, the unit should be moved with care.
Quick stops, excessive force, and uneven surfaces may cause the unit or cart to overturn or fall.
7 **Condensation** — Moisture may form on the CD pickup lens when:
- The unit is moved from a cold spot to a warm spot.
- The heating system has just been turned on.
- The unit is used in a very humid room.
- The unit is cooled by an air conditioner.

When this unit has condensation inside, it may not function normally. Should this occur, leave the unit for a few hours, then try to operate again.
8 **Wall or ceiling mounting** — The unit should not be mounted on a wall or ceiling, unless specified in the Operating Instructions.

Electric Power

1 **Power sources** — Connect this unit only to power sources specified in the Operating Instructions, and as marked on the unit.

2 **AC power cord**
- When disconnecting the AC power cord, pull it out by the AC power plug. Do not pull the cord itself.
- Never handle the AC power plug with wet hands, as this could result in fire or shock.
- Power cords should be firmly secured to avoid being severely bent, pinched, or walked upon. Pay particular attention to the cord from the unit to the power socket.
- Avoid overloading AC power plugs and extension cords beyond their capacity, as this could result in fire or shock.

3 **When not in use** — Unplug the AC power plug from the power socket if the unit will not be used for several months or more. When the cord is plugged in, a small amount of current continues to flow to the unit, even when the power is turned off.

Maintenance

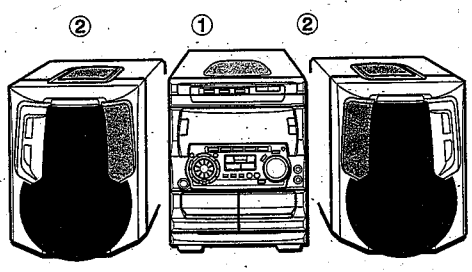
Clean the unit only as recommended in the Operating Instructions.

Damage Requiring Service

Have the units serviced by a qualified service technician if:
- The AC power cord or plug has been damaged.
- Foreign objects or liquid have got inside the unit.
- The unit has been exposed to rain or water.
- The unit does not seem to operate normally.
- The unit exhibits a marked change in performance.
- The unit has been dropped, or the cabinet has been damaged.

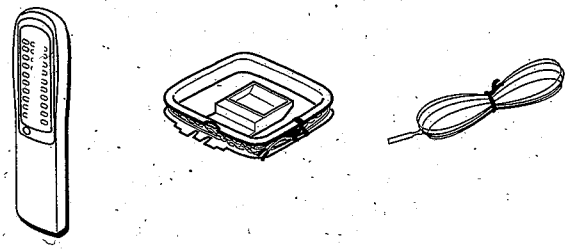
DO NOT ATTEMPT TO SERVICE THE UNIT YOURSELF.

Check your system and accessories



① CX-NS707 Compact disc stereo cassette receiver
② SX-ANS706 Front speakers

Remote control MW/LW loop antenna FM antenna



Operating Instructions, etc

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CONNECTIONS

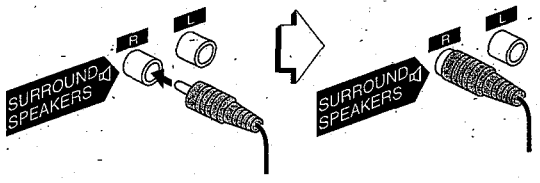
Before connecting the AC cord
The rated voltage of your unit shown on the rear panel is 230 V AC. Check that the rated voltage matches your local voltage.

IMPORTANT
Connect the speakers, antennas, and all optional equipment first. Then connect the AC cord.

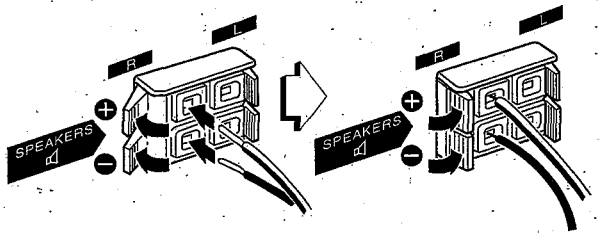
Speakers
The speaker marked R is the right speaker, and the marked L is the left speaker.

1 Connect the right speaker to the main unit.

① Connect the surround speaker cord to **SURROUND SPEAKERS R** terminal.



② Connect the speaker cord to **SPEAKERS R** terminals.



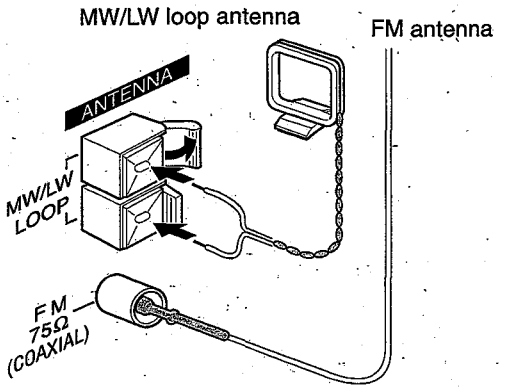
The speaker cord with the white stripe should be connected to the ⊕ terminal and the black cord to the ⊖ terminal.

2 Connect the left speaker to the main unit.

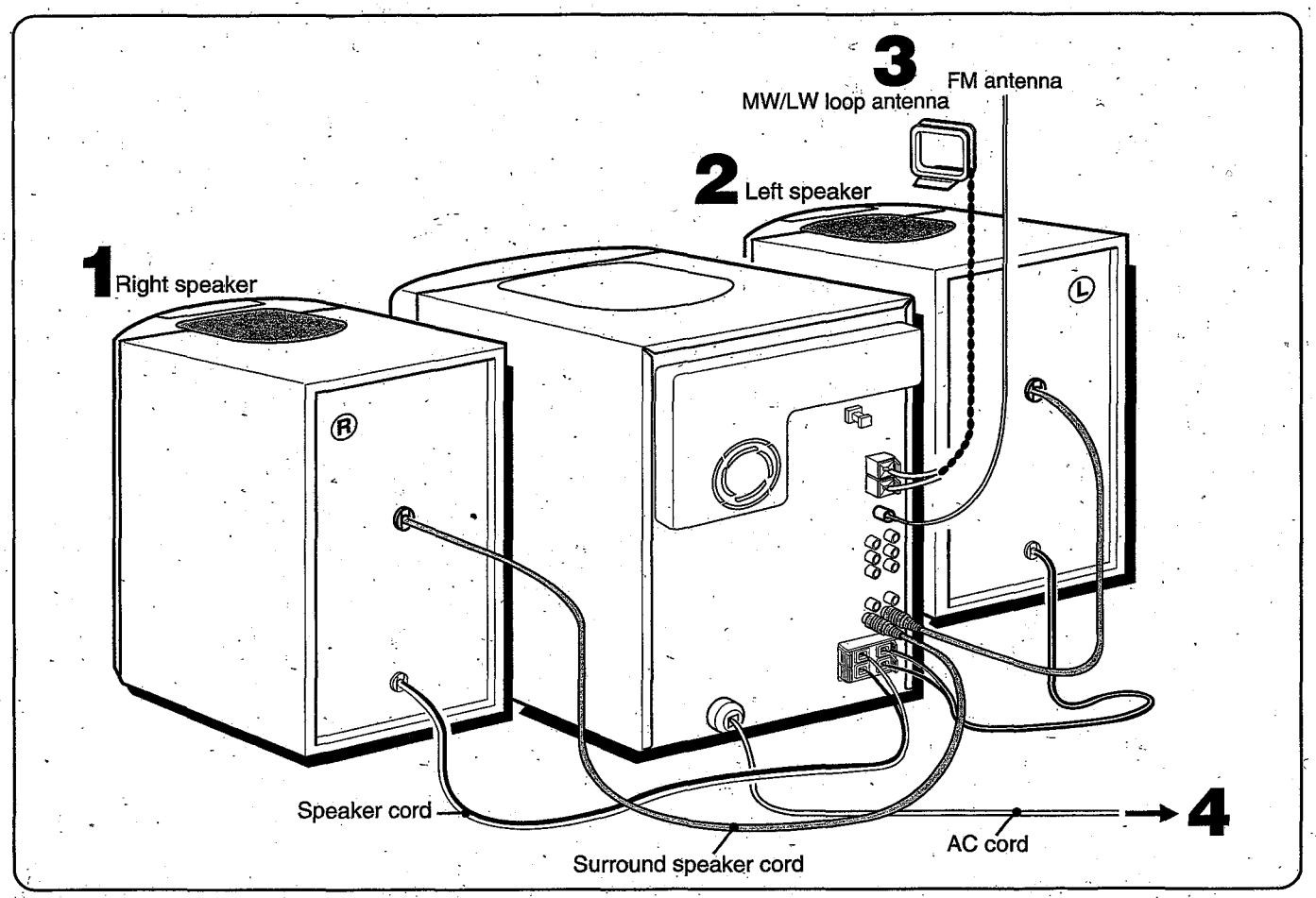
Connect the surround speaker cord to **SURROUND SPEAKERS L** terminal, and speaker cord to **SPEAKERS L** terminals in the same manner as step 1.

3 Connect the supplied antennas.

Connect the FM antenna to **FM 75 Ω** terminal and the MW/LW loop antenna to **MW/LW LOOP** terminals.



4 Connect the AC cord to an AC outlet.



To position the antennas

FM unipolar antenna:

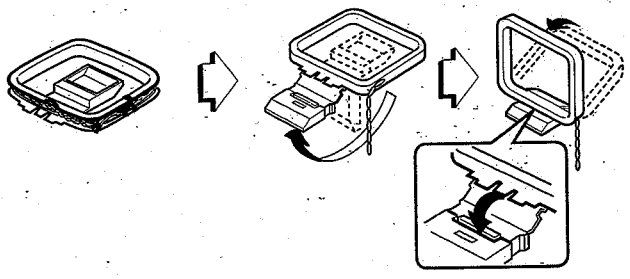
Extend fully and position for the best possible reception.
This antenna is of an instant type, so the use of an outdoor antenna is recommended.

MW/LW loop antenna:

Position to find the best possible reception.

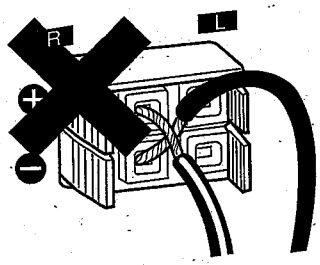
To stand the MW/LW loop antenna on a surface

Fix the claw to the slot.



NOTE

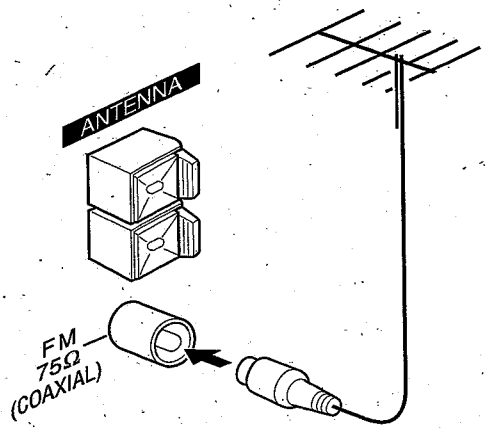
- Be sure to connect the speaker cords correctly. Improper connections can cause short circuits in **SPEAKERS** terminals.



- Do not leave objects generating magnetism, such as credit cards, near the speakers, as these objects may be damaged.
- Do not bring the FM antenna near metal objects or curtain rails.
- Do not bring the MW/LW loop antenna near other optional equipment, the stereo system itself, the AC cord or speaker cords, since noise will be picked up.
- Do not unwind the MW/LW loop antenna wire.

CONNECTING AN OUTDOOR ANTENNA

For better FM reception, use of an outdoor antenna is recommended.
Connect the outdoor antenna to **FM 75 Ω** terminal.

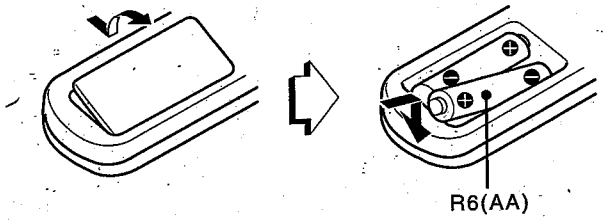


To connect other optional equipment → page 25.

REMOTE CONTROL

Inserting batteries

Detach the battery cover on the rear of the remote control and insert two R6 (size AA) batteries.



When to replace the batteries

The maximum operational distance between the remote control and the sensor on the main unit should be approximately 5 metres (16 feet). When this distance decreases, replace the batteries with new ones.

To use SHIFT on the remote control

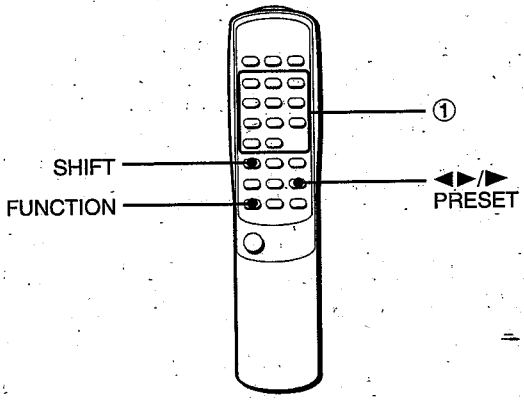
Buttons ① have two different functions. One of these functions is indicated on the button, and the other on the plate above the button.
To use the function on the button, simply press the button.
To use the function on the plate above the button, press the button while pressing **SHIFT**.

To use FUNCTION on the remote control

FUNCTION substitutes for the function buttons (**TAPE DECK 1/2**, **TUNER**, **VIDEO/AUX**, **CD**, **MD**) on the main unit.
Each time **FUNCTION** is pressed, the next function is selected cyclically. When tapes are inserted in both decks, each deck is selected with **FUNCTION**.

◄►/► PRESET on the remote control

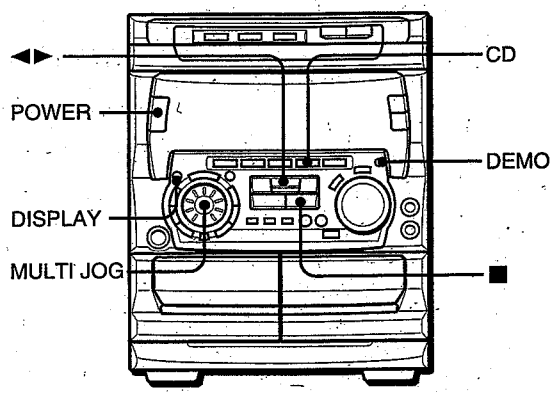
The function is the same as that of **◄►** on the main unit.



NOTE

- If the remote control is not going to be used for an extended period of time, remove the batteries to prevent possible electrolyte leakage.
- The remote control may not operate correctly when:
  - The line of sight between the remote control and the remote sensor inside the display window is exposed to intense light, such as direct sunlight.
  - Other remote controls are used nearby (those of a television, etc.).

BEFORE OPERATION



To turn the power on
Press one of the function buttons (**TAPE, TUNER, VIDEO/AUX, CD, MD**). Playback of the inserted disc or tape begins, or the previously tuned station is received (Direct Play Function).
POWER is also available.
When the unit is turned on, the disc compartment may open and close to reset the unit.

To turn the power off
Press **POWER**.

Flash windows
The windows on the top of the unit and the cassette decks light up or flash while the unit is being powered on.
To turn off the light of the top window, press ■ while pressing **CD**. To turn back on, repeat the above.
The light of the cassette decks cannot be turned off.

To dim the illumination of the display
1 Press **DISPLAY** twice so that "DIMMER" is displayed.
2 Within 4 seconds, turn **MULTI JOG** to select the dimmer mode as follows.

DIMMER 0 ↔ DIMMER 1 ↔ DIMMER 2 ↔ DIMMER 3

DIMMER 0: The normal display.
DIMMER 1: The illumination of the display is dimmer than usual.
DIMMER 2: The illumination of the display is dimmer than DIMMER 1.
DIMMER 3: The illumination of the display is dimmer than DIMMER 2. The spectrum analyzer, the illumination on the buttons, and the windows on the top of the unit and the cassette decks light off.

To change the spectrum analyzer display
3 patterns of spectrum analyzer display can be shown.
Press **DISPLAY** once, and turn **MULTI JOG** within 4 seconds to select the desired spectrum analyzer display.

Game Demo
When the AC cord is connected, the display window demonstrates the game Demo. When the power is turned on, the game Demo is overridden by the operation display. When the power is turned off, the game Demo is restored.

To cancel the game Demo
Press **DEMO**. To re-activate the game Demo, press **DEMO** again.

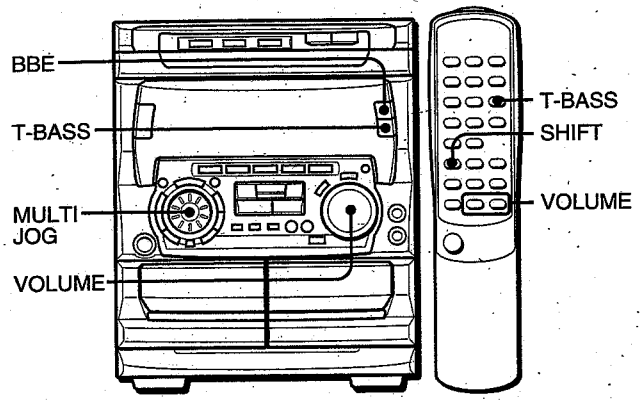
To play the game Demo
1 Press **DEMO** so that the game Demo displays.
2 Press ◄►.
Three numbers on the display start to run.
3 Press ■ once.
The number on the left side stops.
4 Press ■ twice to stop the remaining two numbers.
• You can enjoy the game Demo with game sound by pressing **DEMO** while the power is on.
Scoring:
20 points are given to start the game.
If all the numbers are equal, 50 points are added to the score.
If not equal, one point is subtracted.
If the gained points reach 9999, you win.
If the gained points fall to 0, you lose.

To reset the game Demo
Press **DEMO** twice, then press ◄►. The game starts again.

To mute the game sound
Once, cancel the game Demo by pressing **DEMO**. Then, keep pressing **DEMO** until "♪♪ OFF" is displayed.
To restore the game sound, keep pressing **DEMO** again until "♪♪ ON" is displayed.

NOTE
• During playing the game Demo, ■ and ◄► are available only for the game Demo. Cancel the game Demo to use these buttons for the functions such as CD playing, etc.
• To change the game sound, see "RHYTHM PLAY FUNCTION" on page 7.
• During the game Demo, some indicators unrelated with the actual operation light up on the display.

AUDIO ADJUSTMENTS

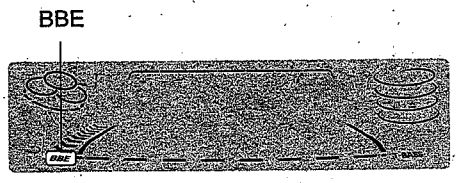


VOLUME

Turn VOLUME on the main unit, or press VOLUME on the remote control.
The volume level is displayed as a number from 0 to MAX (50). The volume level is automatically set to 20 when the power is turned off with the volume level set to 21 or more.

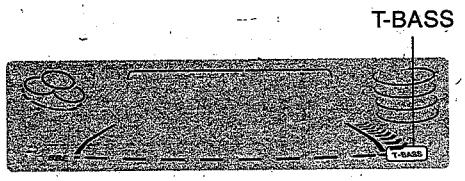
BBE SYSTEM

The BBE system enhances the clarity of high-frequency sound. It also enriches the Karaoke function to make your voice sound clear and pleasant.
Press BBE.
Each time it is pressed, the level changes. Select one of the three levels, or the off position to suit your preference.



SUPER T-BASS SYSTEM

The T-BASS system enhances the realism of low-frequency sound.
Press T-BASS.
Each time it is pressed, the level changes. Select one of the three levels, or the off position to suit your preference.



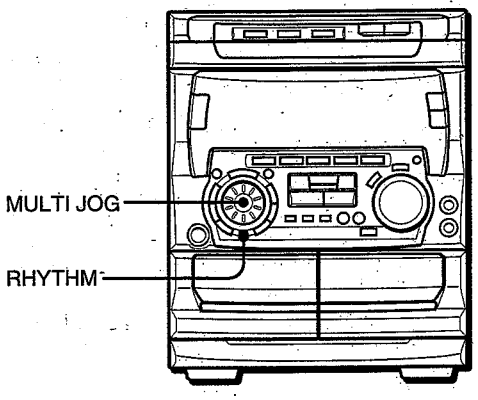
To select with the remote control
Press **T-BASS** while pressing **SHIFT.**

NOTE

- Low frequency sound may be distorted when the T-BASS system is used for a disc or tape in which low frequency sound is originally emphasized. In this case, cancel the T-BASS system.
- When playing back a tape recorded with BBE, it is recommended that BBE be set to off to avoid distorted high frequency sound.

RHYTHM PLAY FUNCTION (BEAT MASTER)

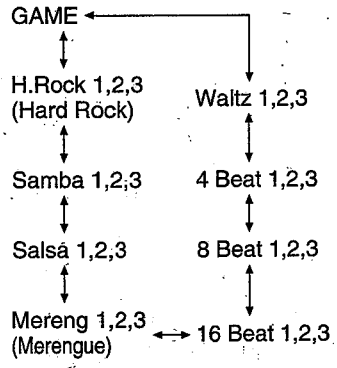
You can enjoy music of CDs, tapes or etc. mixed with rhythm patterns programmed in the unit.



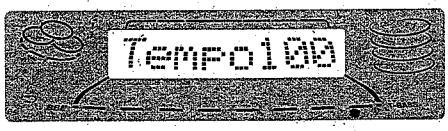
TO SELECT A RHYTHM PATTERN

1 Press RHYTHM.
One of the rhythm patterns is displayed.

2 Turn MULTI JOG to select the desired rhythm pattern.
The rhythm pattern is displayed cyclically as follows.



To change the tempo of the selected rhythm pattern
Press **RHYTHM** once while the selected rhythm pattern is displayed, then turn **MULTI JOG** to select the rhythm tempo. The rhythm tempo can be changed from 90 to 160.



To change the volume level of the selected rhythm pattern
Press **RHYTHM** twice while the selected rhythm pattern is displayed, then turn **MULTI JOG** to select the volume level. The volume level can be changed from 1 to 4.

To cancel the rhythm play function
Press **MULTI JOG**.

To restart the rhythm play function
Press **MULTI JOG** again. The rhythm pattern selected last time starts.

NOTE

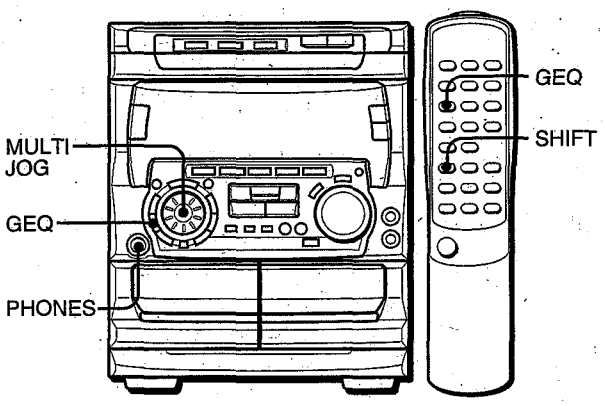
- When the GAME pattern is selected, the rhythm tempo and the rhythm volume level cannot be changed.
- The signal output from **LINE OUT** jack is affected with the rhythm play function.

These voice wave data incorporated in this product are Yamaha Corporation's copyrightable property and we are licensed by Yamaha Corporation.

GRAPHIC EQUALIZER

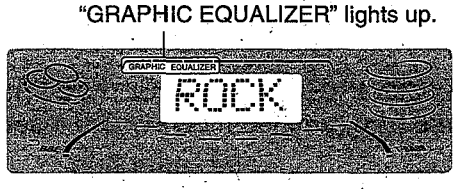
SELECTING THE PROGRAMMED EQUALIZATION CURVE

This unit provides the following 5 different programmed equalization curves.
ROCK: Powerful sound emphasizing treble and bass
POP: More presence in the vocals and midrange
JAZZ: Accented lower frequencies for jazz-type music
CLASSIC: Enriched sound with heavy bass and fine treble.
LATIN: Accented higher frequencies for latin music.



Press GEQ, and turn MULTI JOG to select one of the programmed equalization curve within 4 seconds.

"GRAPHIC EQUALIZER" lights up.



"GRAPHIC EQUALIZER" appears (except "GEQ OFF") and the GEQ mode is displayed cyclically as follows.

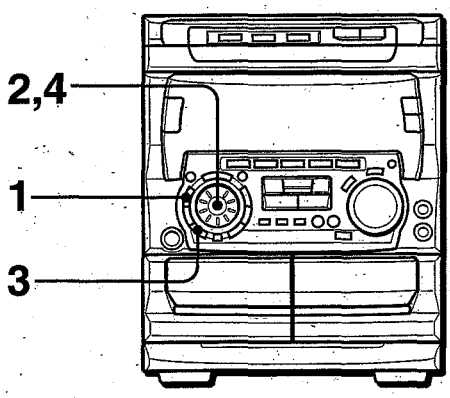
ROCK ↔ POP ↔ JAZZ ↔ CLASSIC ↔ LATIN
Programmed mode
GEQ OFF (cancel) ↔ M4 ↔ M3 ↔ M2 ↔ M1
Manual mode

To display the current GEQ mode
Press **GEQ**. The current mode is displayed for 4 seconds.

To cancel the selected mode
Press **GEQ**, and turn ***MULTI JOG*** to select" GEQ OFF" within 4 seconds. "GRAPHIC EQUALIZER" disappears.

To select with the remote control
Press **GEQ** repeatedly while pressing **SHIFT**. The GEQ mode is displayed cyclically as above.

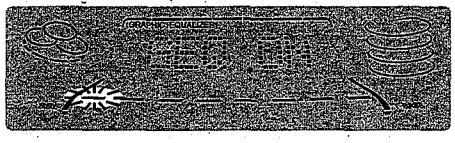
SETTING A NEW EQUALIZATION CURVE MANUALLY



The equalization curve can be customized to suit your preference.

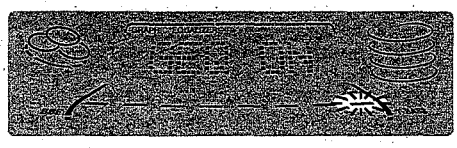
1 **Press LOW.**
The lowest level frequency indicator flashes for 4 seconds.

2 **Within 4 seconds, turn MULTI JOG to adjust the level of the lowest frequency.**



3 **Press HIGH.**
The highest level frequency indicator flashes for 4 seconds.

4 **Within 4 seconds, turn MULTI JOG to adjust the level of the highest frequency.**

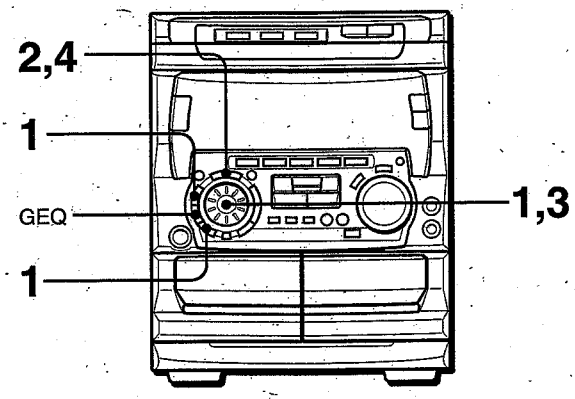


The frequency level indicators between the lowest and the highest are adjusted accordingly.

Using the headphones
Connect headphones to the **PHONES** jack with a standard stereo plug (ø6.3 mm, 1/4 inch).
No sound is output from the speakers while the headphones are plugged in.

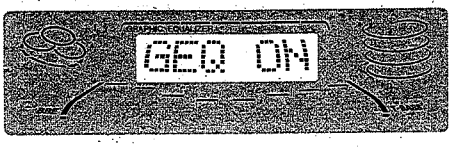
Sound adjustment during recording
The output volume and tone (except BBE and Rhythm play function) of the speakers or headphones may be freely varied without affecting the recording.

MEMORIZING THE NEW EQUALIZATION CURVES

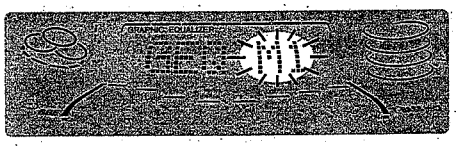


Up to 4 customized equalization curves can be stored as the manual modes M1 - M4.

1 **Set a new equalization curve with HIGH, LOW, and MULTI JOG.**
See "SETTING A NEW EQUALIZATION CURVE MANUALLY".
The created curve is displayed for 4 seconds.



2 **Within 4 seconds, press ENTER.**
"M 1" flashes on the display for 4 seconds.



- If this step is not completed within 4 seconds, press **GEQ** first to display "GEQ ON". Then press **ENTER** within 4 seconds.

3 **Within 4 seconds, turn MULTI JOG to select one of the manual modes M1 - M4 to store the curve.**

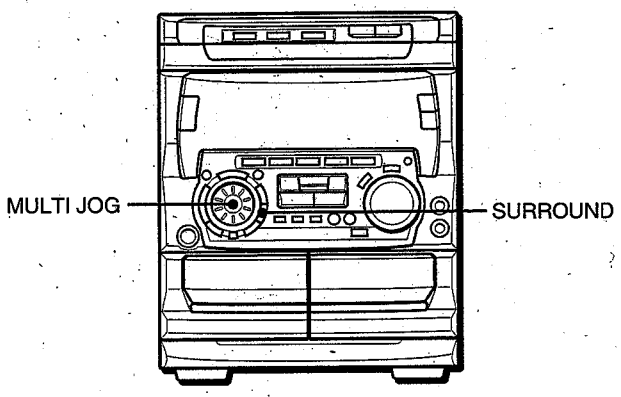
4 **Within 4 seconds, press ENTER.**
The new equalization curve is stored.

To select the stored equalization curve
Press **GEQ**, and turn **MULTI JOG** to select one of the manual modes M1 - M4 within 4 seconds.

DSP SURROUND

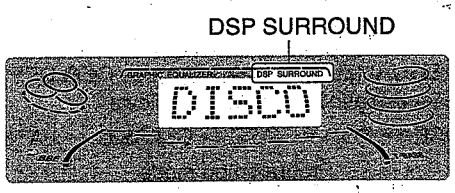
The DSP (Digital Signal Processor) SURROUND adjusts the delay time, the input mode and the feedback level to give a resonant surround sound, allowing you to enjoy the real sound presence of different environments.
This unit has been programmed with 4 different SURROUND modes. You can also create and memorize up to 4 of your own surround settings.

SELECTING A PROGRAMMED DSP SURROUND MODE

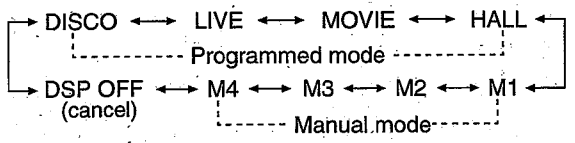


When you select the programmed DSP SURROUND mode, the sound presence of a disco (DISCO), live music performance (LIVE), movie theatre (MOVIE) or concert hall (HALL) can be obtained.

Press SURROUND, and turn MULTI JOG to select the desired programmed mode within 4 seconds.



"DSP SURROUND" appears and the DSP SURROUND mode is displayed cyclically as follows.



Equalization curves are selected automatically to match the DSP SURROUND modes and can also be selected or turned off to suit your preference.

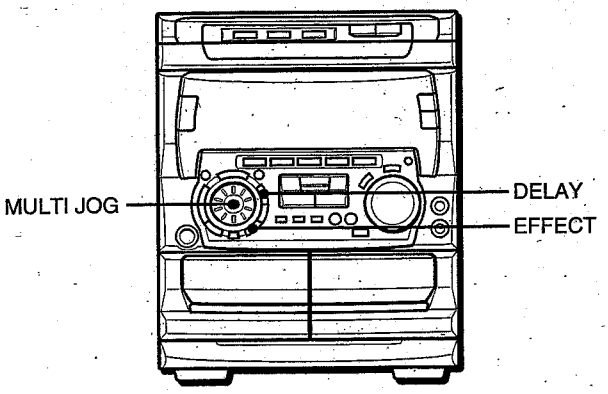
To display the current DSP SURROUND mode
Press **SURROUND**. The current mode is displayed for 4 seconds.

To cancel the selected mode
Press **SURROUND**, and turn **MULTI JOG** to select "DSP OFF" within 4 seconds. "DSP SURROUND" disappears.

When the music source is monaural
Select "LIVE" or "MOVIE" to obtain a simulated stereo effect. When "DISCO" or "HALL" is selected, no sound will be heard from the surround speakers.

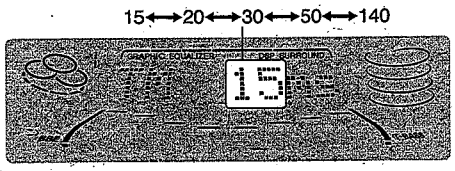
SETTING A NEW DSP SURROUND SOUND MANUALLY

The elements of the DSP SURROUND sound can be customized.



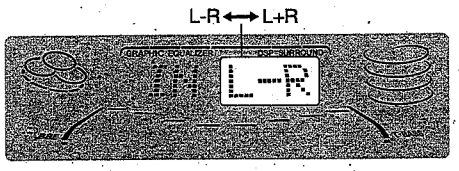
DELAY (delay time)
Increasing the number in the display increases the delay time and surround effect. "15", "20", "30", "50" or "140" mSec can be selected.

To adjust the delay time
Press **DELAY**, and turn **MULTI JOG** to select one of the levels within 4 seconds.



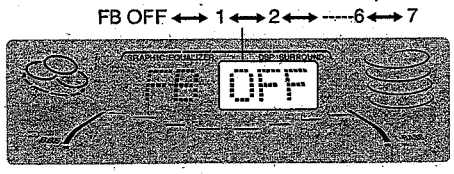
L-R, L+R (input mode)
When "L+R" is displayed, the surround effect increases, especially in the centre.
When "L-R" is displayed, it increases on the outside.

To select an input mode
Press **EFFECT** once, and turn **MULTI JOG** to select "L-R" or "L+R" within 4 seconds.



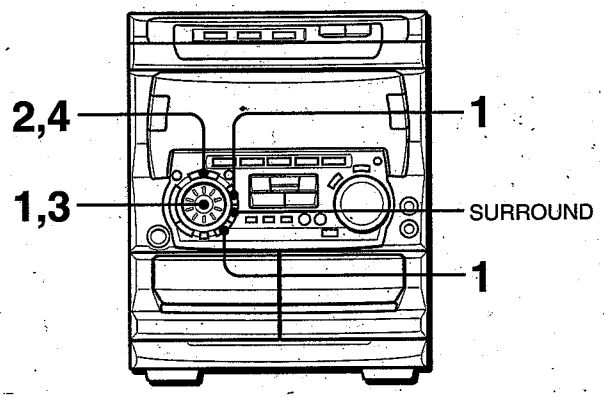
FB (feedback level)
Increasing the number in the display increases the echo.
A level from "OFF" (0) to "7" can be selected.

To adjust the level of feedback
Press **EFFECT** twice, and turn **MULTI JOG** to select one of the levels within 4 seconds.



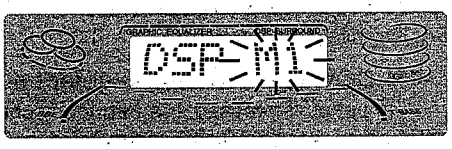
MEMORIZING THE NEW DSP SURROUND SOUND

Up to 4 DSP SURROUND sounds can be memorized as the manual modes M1 - M4.



1 **Set a new DSP SURROUND sound with DELAY, EFFECT, and MULTI JOG.**
See "SETTING A NEW DSP SURROUND SOUND MANUALLY".

2 **Within 4 seconds, press ENTER.**
"M1" flashes on the display.



- If this step is not completed within 4 seconds, press **SURROUND** first to display "DSP ON". Then press **ENTER** within 4 seconds.

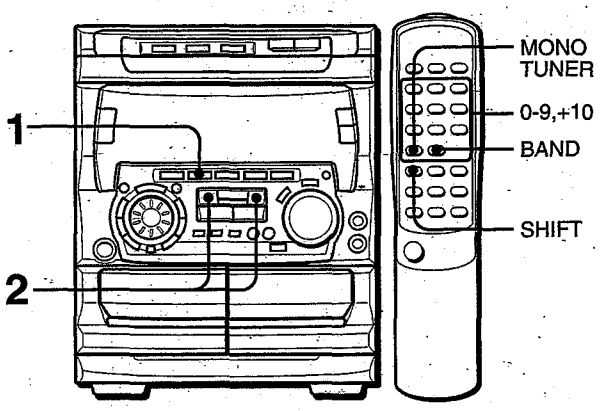
3 **Within 4 seconds, turn MULTI JOG to select one of the manual modes M1 - M4.**

4 **Within 4 seconds, press ENTER.**
The new DSP SURROUND sound is memorized.

To select the stored DSP SURROUND sound
Press **SURROUND**, and turn **MULTI JOG** to select one of the manual modes M1 - M4 within 4 seconds.

NOTE
When the MIC or ECHO level is changed (page 21), the SURROUND mode is automatically cancelled.

MANUAL TUNING



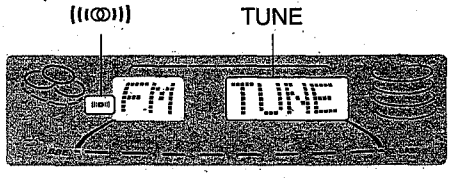
1 Press TUNER BAND repeatedly to select the desired band.

FM → MW → LW

When **TUNER BAND** is pressed while the power is off, the power is turned on directly.

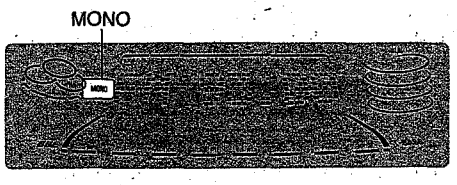
To select a band with the remote control
Press **BAND** while pressing **SHIFT**.

2 Press ◄◄ DOWN or ►► UP to select a station.
Each time the button is pressed, the frequency changes.
When a station is received, "TUNE" is displayed for 2 seconds.
During FM stereo reception, ((◎)) is displayed.



To search for a station quickly (Auto Search)
Keep ◄◄ **DOWN** or ►► **UP** pressed until the frequency starts to change rapidly. After tuning in to a station, the search stops.
To stop the Auto Search manually, press ◄◄ **DOWN** or ►► **UP**.
• The Auto Search may not stop at stations with very weak signals.

When an FM stereo broadcast contains noise
Press **MONO TUNER** on the remote control while pressing **SHIFT** so that "MONO" appears on the display.

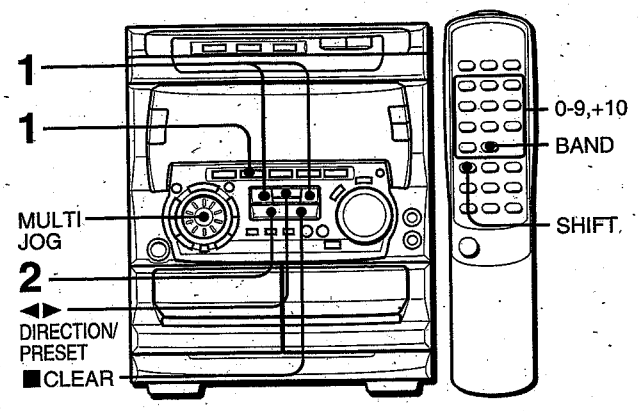


Noise is reduced, although reception is monaural.
To restore stereo reception, press these buttons so that "MONO" disappears.

To change the MW tuning interval
The default setting of the MW tuning interval is 9 kHz/step. If you use this unit in an area where the frequency allocation system is 10 kHz/step, change the tuning interval.
Press POWER while pressing TUNER BAND.
To reset the interval, repeat this procedure.

NOTE
When the MW tuning interval is changed, all preset stations are cleared. The preset stations have to be set again.

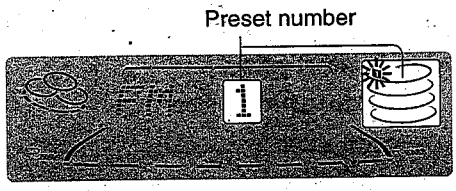
PRESETTING STATIONS



The unit can store a total of 32 preset stations. When a station is stored, a preset number is assigned to the station. Use the preset number to tune in to a preset station directly.

1 **Press TUNER BAND to select a band, and press ◄◄ DOWN or ►► UP to select a station.**

2 **Press ❚❚ SET to store the station.**
A preset number beginning from 1 in consecutive order for each band is assigned to the station.



3 **Repeat steps 1 and 2.**
The next station will not be stored if a total of 32 preset stations for all the bands have already been stored.

PRESET NUMBER TUNING

Use the remote control to select the preset number directly.

1 **Press BAND while pressing SHIFT to select a band.**

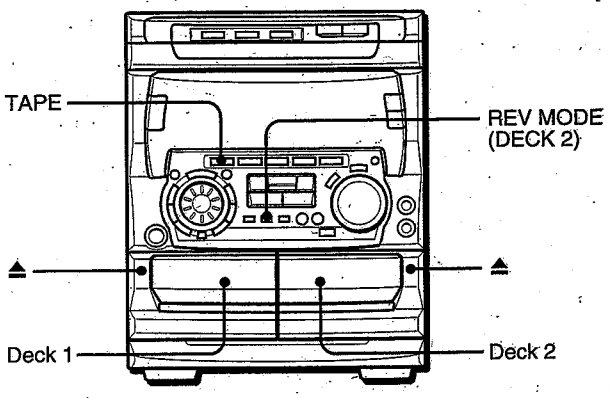
2 **Press numbered buttons 0-9 and +10 to select a preset number.**
Example:
To select preset number 20, press **+10**, **+10** and **0**.
To select preset number 15, press **+10** and **5**.

Selecting a preset number on the main unit
Press **TUNER BAND** to select a band. Then, press **◄► DIRECTION/PRESET** repeatedly or turn **MULTI JOG**.
Each time **◄► DIRECTION/PRESET** is pressed, the next ascending number is selected.

To clear a preset station
Select the preset number of the station to be cleared. Then, press **■ CLEAR**, and press **❚❚ SET** within 4 seconds.
The preset numbers of all other stations in the band with higher numbers are also decreased by one.

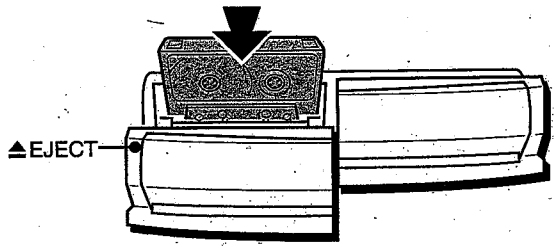
BASIC OPERATIONS

INSERTING TAPES



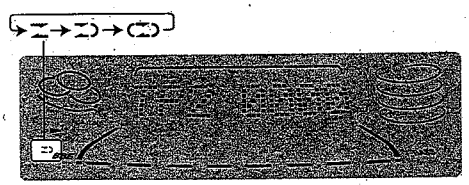
- On deck 1, tapes are always played back on both sides. On deck 2, you can select a reverse mode to play back one or both sides.
- Use Type I (normal), Type II (high/CrO_2) or Type IV (metal) tapes for playback.

Press TAPE and press ⏏ EJECT to open the cassette holder.



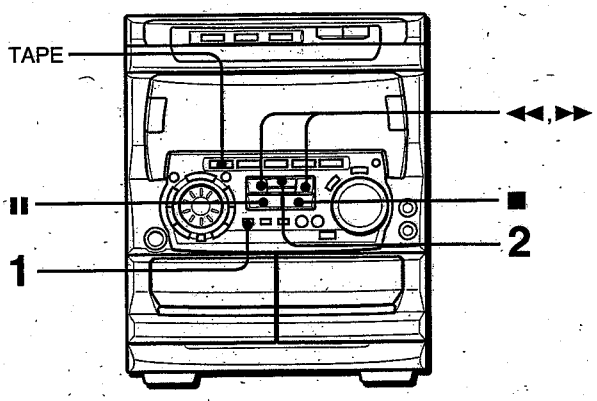
Insert a tape with the exposed side down. Push the cassette holder to close.

To select a reverse mode (deck 2 only)
Each time **REV MODE** is pressed, the reverse mode changes.



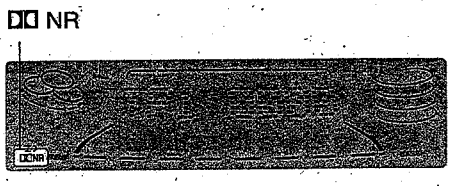
To play one side only, select ⇉.
To play from front side to reverse side once only, select ⇉.
To play both sides repeatedly, select ⇄.
- When tapes are loaded in both decks, ⇉ on the display indicates Continuous Play.

PLAYING BACK A TAPE



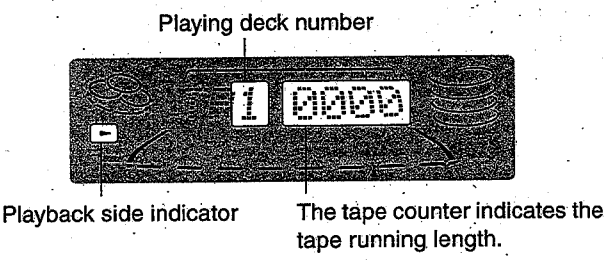
Insert a tape.

***1* Press DOLBY NR and turn Dolby NR on or off to match the playback tape.**



For tapes recorded with DOLBY NR, turn on DD NR.
For tapes recorded without DOLBY NR, turn off DD NR.

***2* Press ◀▶ to start play.**



▶: The front side is being played (forward).
◀: The back side is being played (reverse).

When tapes are loaded in both decks
Press **TAPE** first to select a deck.
The selected deck number is displayed.

To stop play, press ■.
To pause play (deck 2 only), press II. To resume play, press again.
To change the playback side, press ◀▶ **DIRECTION/PRESET** in play or pause mode.
To fast forward or rewind, press ◀◀ or ▶▶. Then press ■ to stop the tape.

To start play when the power is off (Direct Play Function)
Press **TAPE**. The power is turned on and play of the inserted tape begins.

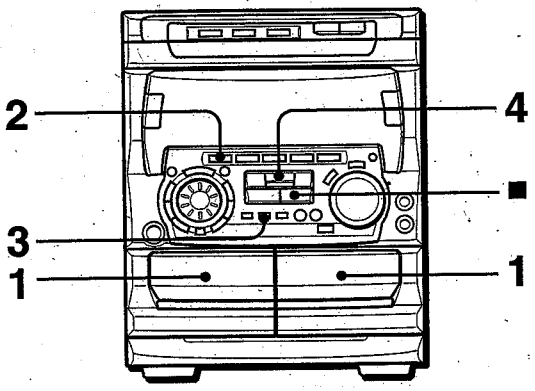
To set the tape counter to 0000
Press ■ **CLEAR** in stop mode.
The counter is also set to 0000 when the cassette holder is opened and closed.

MUSIC SENSOR

If there is a 4-second or longer blank between each track, a search for the beginning of the current or next track during playback can be done easily.
Press ◄◄ or ►► during playback referring to the playback side indicator (◄ or ►) on the display.
For example, when ►► is pressed while ► is displayed, playback of the next track starts.

Music sensor function may not be able to detect tracks under the following conditions:
- Blanks of less than 4 seconds between tracks
- Noisy blanks
- Long passages of low-end sound
- Low overall recording levels

CONTINUOUS PLAY



After playback on one deck finishes, the tape in the other deck will start to play without interruption.

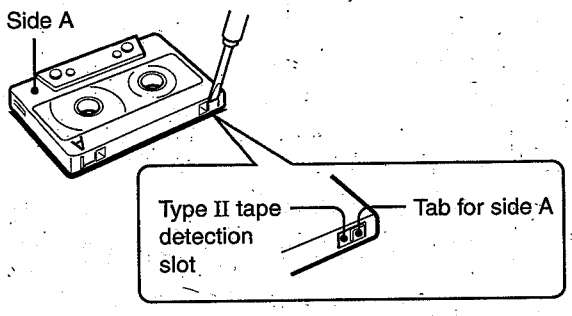
1 **Insert tapes into deck 1 and deck 2.**

2 **Press TAPE DECK1/2 to select the deck to be played back first.**

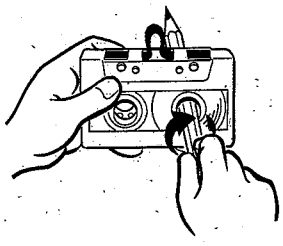
3 **Press REV MODE to select ⇄.**

4 **Press ◄► to start playback.**
Playback continues until ■ is pressed.

About cassette tapes
- **To prevent accidental erasure**, break off the plastic tabs on the cassette tape after recording with a screwdriver or other pointed tool.

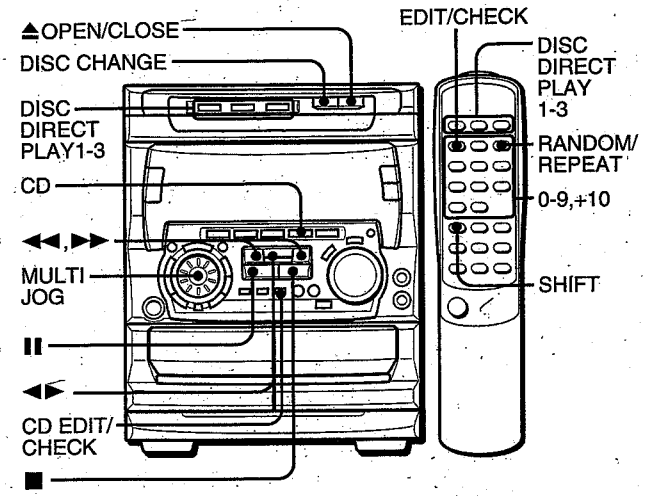


To record on the tape again, cover the tab openings with adhesive tape, etc. (On Type II tapes, take care not to cover the Type II tape detection slot.)
- **120-minute or longer tapes** are extremely thin and easily deformed or damaged. They are not recommended.
- **Take up any slack in** the tape with a pencil or similar tool before use. Slack tape may break or jam in the mechanism.



DOLBY NR system
The Dolby Noise Reduction system reduces tape hiss noise. For optimum performance when playing back a tape recorded with the DOLBY NR system, turn on the DOLBY NR system.

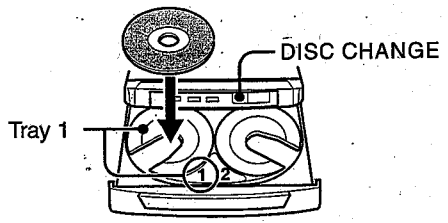
BASIC OPERATIONS

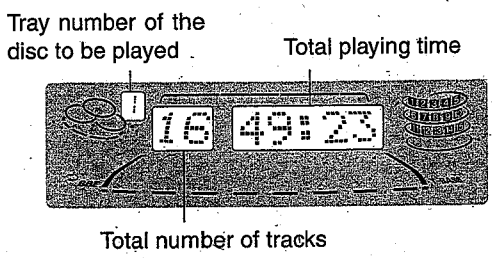


LOADING DISCS

Press CD, then press ≜ OPEN/CLOSE to open the disc compartment. Load disc(s) with the label side up.

To play one or two discs, place the discs on tray 1 and 2.
To play three discs, press **DISC CHANGE** to rotate the trays after placing two discs. Place the third disc on tray 3.
Close the disc compartment by pressing **≜ OPEN/CLOSE**.

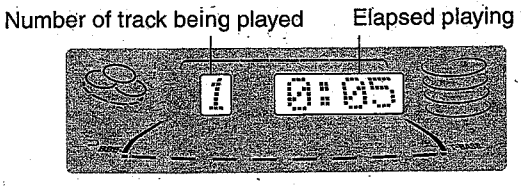




PLAYING DISCS

Load discs.

To play all discs in the disc compartment, press ◄►.
Play begins with the disc on tray 1.



To play one disc only, press DISC DIRECT PLAY 1-3.
The selected disc is played once.

To stop play, press ■.
To pause play, press II. To resume play, press again.
To search for a particular point during playback, keep ◄◄ or ►► pressed and release it at the desired point.
To skip to the beginning of a track during playback, press ◄◄ or ►► repeatedly or turn **MULTI JOG**.
To remove discs, press **≜ OPEN/CLOSE**.

To start play when the power is off (Direct Play Function)
Press **CD**. The power is turned on and play of the loaded disc(s) begins.
When **≜ OPEN/CLOSE** is pressed, the power is also turned on and the disc compartment is opened.

To check the remaining time
During play, press **CD EDIT/CHECK**. The amount of time remaining until all tracks finish playing is displayed. To restore the playing time display, repeat the above.

- ***EDIT/CHECK** on the remote control is also available instead of **CD EDIT/CHECK** on the main unit. When using the remote control, press **EDIT/CHECK** while pressing **SHIFT**.*

Selecting a track with the remote control
1 Press **DISC DIRECT PLAY 1-3** to select a disc.
2 Press numbered buttons **0-9** and **+10** to select a track.
Example:
To select the 25th track, press **+10**, **+10** and **5**.
To select the 10th track, press **+10** and **0**.
The selected track starts to play and continues to the end of that disc.

Replacing discs during play
While one disc is playing, the other discs can be replaced without interrupting play.
1 Press **DISC CHANGE**.
2 Remove the discs and replace with other discs.
3 Press **≜ OPEN/CLOSE** to close the disc compartment.

NOTE

- When loading an 8-cm (3-inch) disc, put it onto the inner circle of the tray.
- Do not place more than one compact disc on one disc tray.
- Do not tilt the unit with discs loaded. Doing so may cause malfunctions.
- Do not use irregular shape CDs (example: heart-shaped, octagonal ones). It may result in malfunctions.

RANDOM /REPEAT PLAY

Use the remote control.

RANDOM play
All the tracks on the selected disc or all the discs can be played randomly.

REPEAT play
A single disc or all the discs can be played repeatedly.

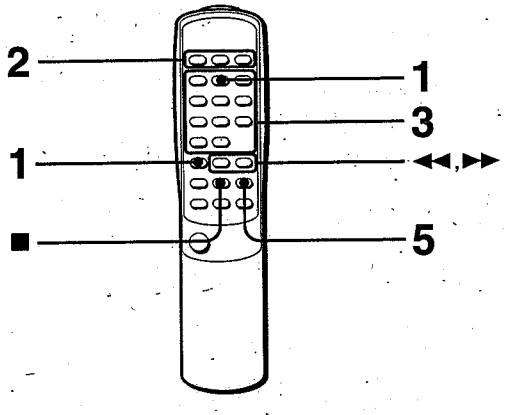
Press RANDOM/REPEAT while pressing SHIFT .
Each time it is pressed, the function can be selected cyclically.
RANDOM play — RANDOM lights up on the display.
REPEAT play — ↻ lights up on the display.
RANDOM/REPEAT play — RANDOM and ↻ light up on the display.
Cancel — RANDOM and ↻ disappear from the display.

To play all discs, press ◄► to start play.
To play a single disc, press one of **DISC DIRECT PLAY 1-3** to start play.

NOTE
During random play it is not possible to skip to the previously played track with ◄◄.

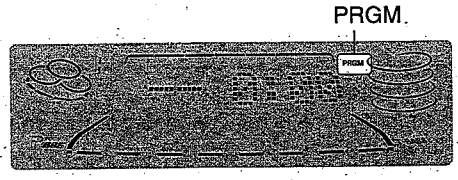
PROGRAMMED PLAY

Up to 30 tracks can be programmed from any of the inserted discs.



Use the remote control.

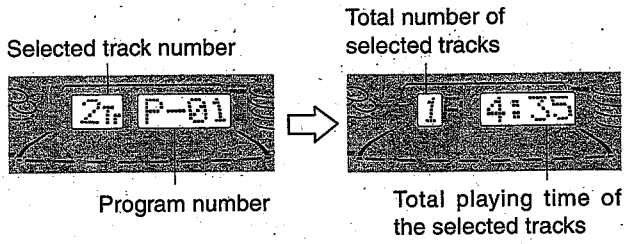
***1* Press PRGM twice while pressing SHIFT in stop mode.**
"PRGM" is displayed .



- When **PRGM** is pressed once in step 1, the unit enters the KARAOKE PROGRAM (page 22).

***2* Press DISC DIRECT PLAY 1-3 to select a disc.**
Go to the next step when the tray stops rotating.

***3* Press numbered buttons 0-9 and +10 to program a track.**
Example:
To select the 25th track, press **+10**, **+10** and **5**.
To select the 10th track, press **+10** and **0**.



***4* Repeat steps 2 and 3 to program other tracks.**

***5* Press ◄► to start play.**

To check the program
Each time ◄◄ or ►► is pressed in stop mode, a disc number, track number, and program number will be displayed.

To clear the program
Press ■ **CLEAR** in stop mode.

To add tracks to the program
Repeat steps 2 and 3 in stop mode. The track will be programmed after the last track.

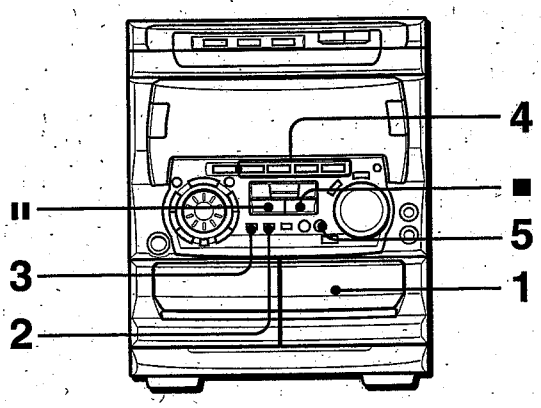
To change the programmed tracks
Clear the program and repeat all the steps again.

To play the programmed tracks repeatedly
After programming the tracks, press **RANDOM/REPEAT** repeatedly while pressing **SHIFT** until ↻ appears on the display.

NOTE
During programmed play, you cannot perform random play, checking the remaining time, or selecting a disc or track.

BASIC RECORDING

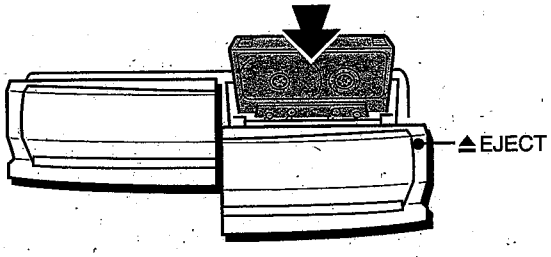
This section explains how to record from the tuner, CD player, or external equipment.



Preparation
- Use Type I (normal) and Type II (high/CrO_2) tapes for recording.
- Set the tape to the point where recording will start.

1 Insert the tape to be recorded on into deck 2.

Insert the tape with the side to be recorded on first facing out from the unit.



2 Press REV MODE to select the reverse mode.

To record on one side only, select ⇉.
To record on both sides, select ⇉ or ⇄.

3 Press DOLBY NR to turn Dolby NR on or off.

To record with DOLBY NR, turn on DD NR.
To record without DOLBY NR, turn off DD NR.

4 Press function (CD, TUNER, VIDEO/AUX or MD) and prepare the source to be recorded.

To record from a CD, press **CD** and load the disc(s).
To record from a radio broadcast, press **TUNER** and tune in to a station.
To record from a connected source, press **VIDEO/AUX** or **MD**.

5 Press ● REC/REC MUTE to start recording.

When the selected function is CD, playback and recording start simultaneously.

To stop recording, press ■.
To pause recording, press **II**. (Applicable when the source is TUNER, VIDEO/AUX or MD) To resume recording, press it again.

Sound adjustment during recording
The output volume and tone (except BBE and Rhythm play function) of the speakers or headphones may be freely varied without affecting the recording.

INSERTING BLANK SPACES

Insertion of 4-second blank spaces enables you to activate the Music Sensor function. (Applicable when the source is TUNER, VIDEO/AUX or MD.)

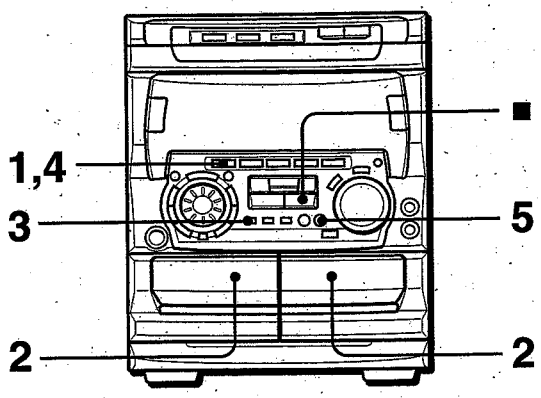
1 **Press ● REC/REC MUTE during recording or while in recording pause mode.**
REC on the display flashes for 4 seconds and the tape runs without recording. After 4 seconds, the deck enters the recording pause mode.
2 **Press II to resume recording.**

To insert a blank space of less than 4 seconds, press ● **REC/REC MUTE** again while REC is flashing.
To insert blank spaces of more than 4 seconds, after the deck enters recording pause mode, press ● **REC/REC MUTE** again. Each time the button is pressed, a 4-second blank space is added.

NOTE
If squealing or beating sounds occur when recording an MW or LW broadcast, press **MONO TUNER** on the remote control while pressing **SHIFT** until "BEAT 1" or "BEAT 2" is displayed, so as to eliminate the noise.

To erase a recording
Make sure the microphone is not connected to this unit and the rhythm play function (Page 7) is cancelled.
Set the microphone volume and the echo level to OFF (see page 21).
1 Insert the tape to be erased into deck 2 and press **TAPE DECK 1/2** to display "TP 2".
2 Set the tape to the point where the erasure is to be started.
3 Set the reverse mode by pressing **REV MODE**.
4 Press ● **REC/REC MUTE** to start the erasure.

DUBBING A TAPE MANUALLY



NOTE

- Set the tape to the point where recording will start.
- The reverse mode is automatically set to ⇄.
  Note that recording will be done on one side of the tape only.

1 **Press TAPE.**

2 **Insert the original tape into deck 1 and the tape to be recorded on into deck 2.**
Insert the tapes with the sides to be played back or recorded on facing out from the unit.

3 **Press DOLBY NR to turn off the Dolby NR.**
DD NR on the display goes out.

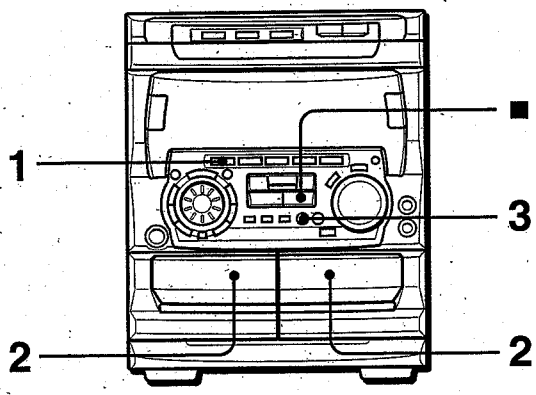
4 **Press TAPE DECK 1/2 to select deck 1.**
"TP 1" is displayed.

5 **Press ● REC/REC MUTE to start recording.**
Playing and recording start simultaneously.

To stop dubbing
Press ■.

To set the Dolby NR when playing back the dubbed tape
Press **DOLBY NR** and turn Dolby NR on or off to match the original tape.

DUBBING THE WHOLE TAPE



This function allows you to make exact copies of both sides of the original tape. The reverse side of both tapes will start simultaneously as soon as the longer tape has been reversed.

NOTE

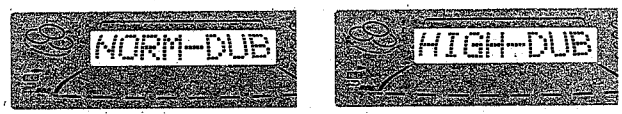
- Dubbing does not start from a point halfway in the tape.
- The reverse mode is automatically set to ⇉.
- The Dolby NR does not affect recording.

1 **Press TAPE.**

2 **Insert the original tape into deck 1 and the tape to be recorded on into deck 2.**
Insert each tape with the side to be played back or recorded on facing out from the unit.

3 **Press SYNC DUB once or twice to start recording.**
① **For recording at normal speed**, press it once to display NORM-DUB.
② **For recording at high speed**, press it twice to display HIGH-DUB.

① ②



The tapes are rewound to the beginning of the front sides, and recording starts.

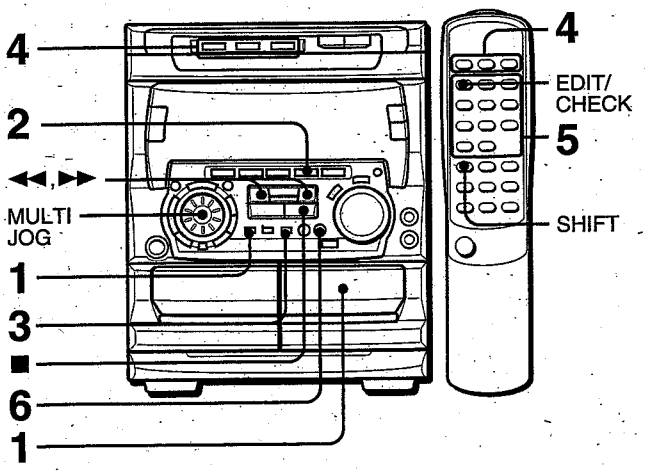
To stop dubbing
Press ■.

To set the Dolby NR when playing back the dubbed tape
Press **DOLBY NR** and turn Dolby NR on or off to match the original tape.

NOTE

Recording does not start, if the erasure prevention tab on either side of the tape is broken off.

AI EDIT RECORDING



The AI edit recording function enables CD recording without worrying about tape length and track length. When a CD is inserted, the unit automatically calculates the total track length. If necessary, the order of tracks is rearranged so that no track is cut short.
(AI: Artificial Intelligence)

NOTE

AI edit recording will not start from a point halfway into the tape. The tape must be recorded from the beginning of either side.

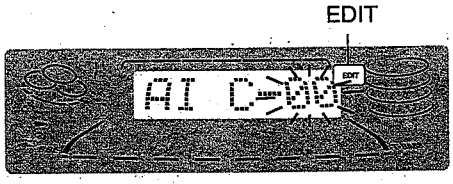
***1* Insert the tape into deck 2, and press DOLBY NR to turn Dolby NR on or off.**

Insert the tape with the side to be recorded on first facing out from the unit.

***2* Press CD and load the disc(s).**

***3* Press CD EDIT/CHECK once.**

"EDIT" is displayed.



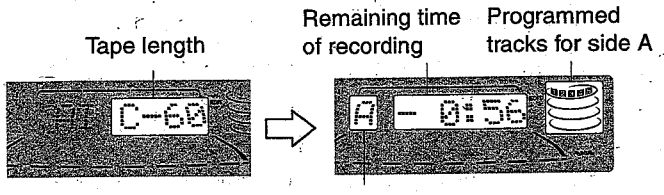
• When "PRGM" is displayed, press **CD EDIT/CHECK** again.

***4* Press DISC DIRECT PLAY 1-3 to select a disc.**

***5* Press numbered buttons 0-9 on the remote control to designate the tape length.**

10 to 99 minutes can be specified.
Example: When using a 60-minute tape, press **6** and **0**.
In a few seconds, the tracks to be recorded on each side of the tape are determined.

• **◀◀**, **▶▶** or **MULTI JOG** are also available to designate the tape length.



Tape side
A: First recording side
B: Second recording side

***6* Press ● REC/REC MUTE to start recording on the first side.**

The tape is rewound to the beginning of the front side, the lead segment is played through for 10 seconds, and recording starts. When recording on the front (side A) ends, recording on the back (side B) starts.

To stop recording

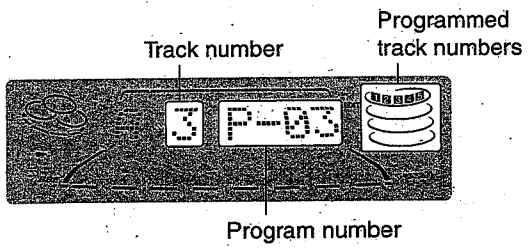
Press ■ **CLEAR**. Recording and CD play stop simultaneously.

To clear the edit program

Press ■ **CLEAR** twice so that "EDIT" disappears on the display.

To check the order of the programmed track numbers

Before recording, press **CD EDIT/CHECK** to select side A or B, and press **◀◀** or **▶▶** repeatedly.



To add tracks from other discs to the edit program

If there is any time remaining on the tape after step 5, you can add tracks from other discs in the CD compartment.

1 Press **CD EDIT/CHECK** to select side A or B.
2 Press **DISC DIRECT PLAY 1-3** to select a disc.
3 Press numbered buttons on the remote control to select tracks. A track whose playing time is longer than the remaining time cannot be programmed.
4 Repeat steps 2 and 3 to add more tracks.

• ***EDIT/CHECK** on the remote control is also available instead of **CD EDIT/CHECK** on the main unit. When using the remote control, press **EDIT/CHECK** while pressing **SHIFT**.*

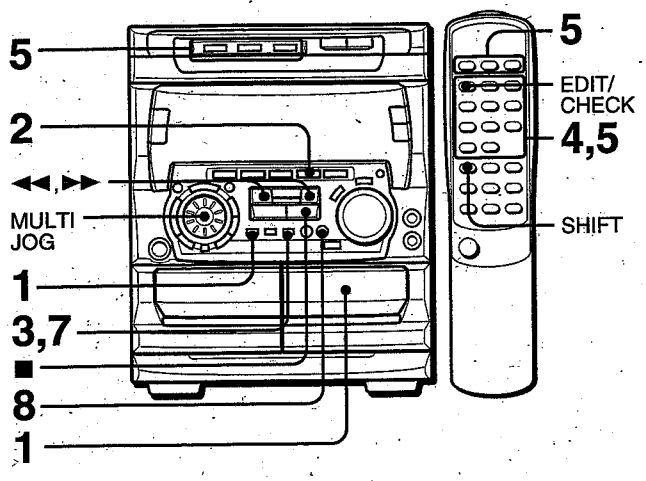
Time on cassette tapes and editing time

The actual cassette recording time is usually a little longer than the specified recording time printed on the label. This unit can program tracks to use the extra time. When the total recording time is a little longer than the tape's specified recording time after editing, the display shows the extra time (without a minus mark), instead of the time remaining on the tape (with the minus mark).

NOTE

• The AI edit recording function cannot be used with discs containing 31 tracks or more.
• Recording is inhibited if the erasure prevention tab on either side of the tape is broken off.

PROGRAMMED EDIT RECORDING



In the programmed edit recording function the tracks can be programmed while checking the remaining time on each side of the tape as the tracks are programmed.

NOTE

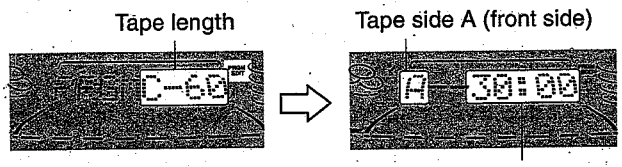
The programmed edit recording will not start from a point halfway in the tape. The tape must be recorded on from the beginning of either side.

1 **Insert the tape into deck 2, and press DOLBY NR to turn Dolby NR on or off.**
Insert the tape with the side to be recorded on first facing out from the unit.

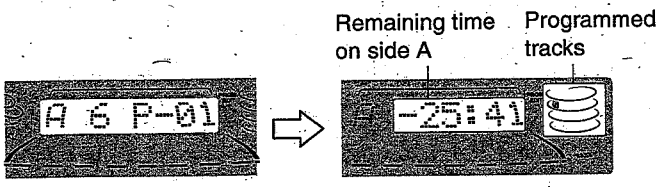
2 **Press CD and load the disc(s).**

3 **Press CD EDIT/CHECK twice.**
"EDIT" and "PRGM" are displayed.
• When "AI" is displayed, press **CD EDIT/CHECK** again.

4 **Press numbered buttons on the remote control to designate the tape length.**
10 to 99 minutes can be specified.
• ◀◀, ▶▶ or **MULTI JOG** are also available to designate the tape length.

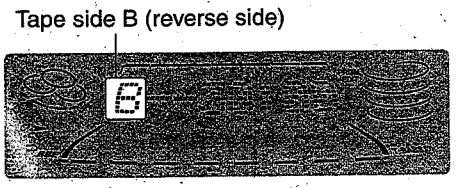


5 **Press DISC DIRECT PLAY 1-3 to select a disc. Then, press numbered buttons 0-9 and + 10 on the remote control to program a track.**
Example: To select the 10th track of disc 2, press **DISC DIRECT PLAY 2**, then press **+10** and **0**.



6 **Repeat step 5 for the rest of the tracks for side A.**
A track whose playing time is longer than the remaining time cannot be programmed.

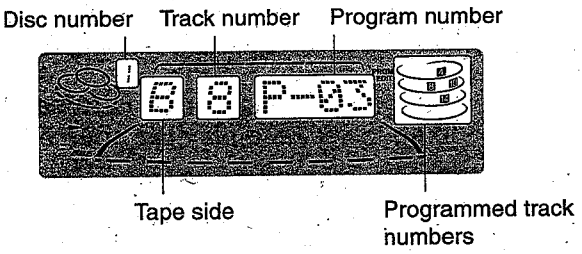
7 **Press CD EDIT/CHECK to select side B and program the tracks for side B.**
After confirming "B" on the display, repeat step 5.



8 **Press the ● REC/REC MUTE button to start recording.**
The tape is rewound to the beginning of the front side, the lead segment is played through for 10 seconds, and recording starts. When recording on the front side (A) ends, recording on the back side (B) starts.

To stop recording
Press ■. Recording and CD play stop simultaneously.

To check the order of the programmed track numbers
Before recording, press **CD EDIT/CHECK** to select side A or B, and press ◀◀ or ▶▶ repeatedly.



To change the program of each side
Press **CD EDIT/CHECK** to select side A or B, and press ■ **CLEAR** to clear the program on the selected side. Then program tracks again.

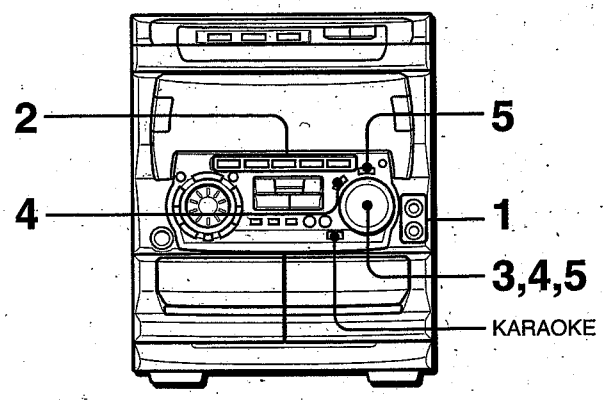
To clear the edit program
Press ■ **CLEAR** twice so that "EDIT" disappears on the display.

• ***EDIT/CHECK*** *on the remote control is also available instead of* ***CD EDIT/CHECK*** *on the main unit. When using the remote control, press* ***EDIT/CHECK*** *while pressing* ***SHIFT****.*

NOTE

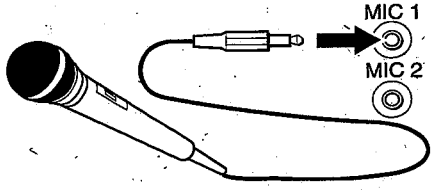
• Up to 30 tracks can be programmed from any of the inserted discs.
• Recording is inhibited if the erasure prevention tab on either side of the tape is broken off.

MICROPHONE MIXING



Two microphones (not supplied) can be connected to this unit, allowing you to sing along to music sources.
Use microphones with mini plugs (ø3.5 mm, 1/8 inch).

1 Connect your microphones to MIC 1 and MIC 2 jacks.



2 Press one of the function buttons to select the source to be mixed, and play the source.

3 Adjust the volume and tone of the source.

4 Press MIC and turn VOLUME within 4 seconds to adjust the microphone volume.
The microphone volume can be selected from 1 to MAX (7) or OFF (cancel).
The volume of both microphones is adjusted simultaneously.

5 Press ECHO and turn VOLUME within 4 seconds to adjust the echo level.
The echo level can be selected from 1 to MAX (7) or OFF (cancel).

To change the delay time of echo
Hold down **ECHO** while the echo is on.
"L" (Long) and "M" (Middle) are displayed alternately. At the desired position, release the button.

To record microphone sound mixed with source sound
Follow the procedure for recording from the sound source (see page 17).
SYNC DUB cannot be used for mixing recording.

When not using the microphones
Set the microphone volume and echo level to OFF and remove the microphones from **MIC** jacks.

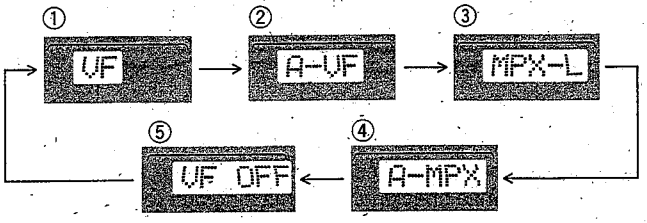
NOTE
- When the MIC or ECHO level is changed, the SURROUND mode is automatically cancelled.
- If a microphone is held too near the speakers, a howling sound may be produced. In this case, hold the microphone away from the speakers, or decrease the microphone volume.
- If sound through the microphone is extremely loud, it may be distorted. In this case, decrease the microphone volume.
- When the function is changed, the microphone volume and the echo volume are set to off.

Recommended microphones
The use of unidirectional type microphones is recommended to prevent howling. Contact your local Aiwa dealer for details.

VOCAL FADER/MULTIPLEX FUNCTIONS

This unit can use discs or tapes as Karaoke sources.
Use the vocal fader function for ordinary discs or tapes.
Use the multiplex function for multi audio discs or tapes.

Press KARAOKE repeatedly to select the vocal fader or multiplex function.
Each time **KARAOKE** is pressed, one of these functions is selected cyclically.



① Vocal Fader
The singer's voice becomes softer than the accompaniment.

② Auto Vocal Fader
The singer's voice becomes softer only while there is audio input through a microphone.

③ Multiplex
Only the sound on the left channel is heard from both speakers, and the sound on the right channel is muted.

④ Auto Multiplex
The sound on the left channel is heard from both speakers, and the sound on the right channel is muted only while there is audio input through a microphone.

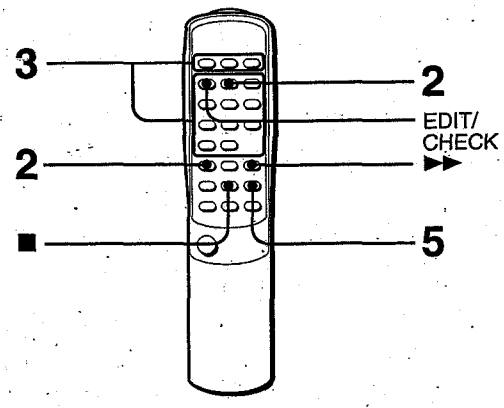
⑤ Cancel

To change the time lag setting in Auto Vocal Fader or Auto Multiplex function
The muted original singer's voice can be turned faster than the normal level.
When Auto Vocal Fader or Auto Multiplex is selected, "A-VF" or "A-MPX" is displayed for 3 seconds and changes to the selected function name. After the selected function name is displayed, keep pressing **KARAOKE** until FAST is displayed.
To return to the initial setting, select SLOW.
When the power is turned off, SLOW is restored.

To change the audible channel in Multiplex function
When Multiplex is selected, "MPX -L" is displayed for 3 seconds and changes to the selected function name. After the selected function name is displayed, keep pressing **KARAOKE** until MPX-R is displayed.
To return to the initial setting, select MPX-L.
When the power is turned off, MPX-L is restored.

NOTE
- The Karaoke functions may not operate correctly with the following kinds of CDs or tapes.
  - Those with monaural sound.
  - Those recorded with strong echoes.
  - Those with the vocal part recorded on the right or left side of the sound width.
- While the Karaoke function is on, the sound is output as monaural.
- When the function is changed, the Karaoke function is cancelled.

KARAOKE PROGRAM

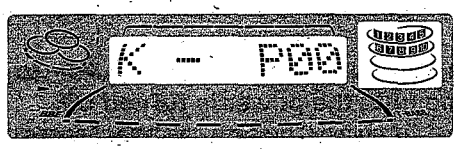


Before or during CD play, you can reserve up to 15 tracks to be played after the current track. Each reservation is cleared when it finishes playing.

Use the remote control.

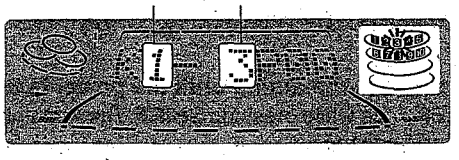
1 **Press CD and load the discs.**

2 **Press PRGM <u>once</u> while pressing SHIFT.**



3 **Press DISC DIRECT PLAY 1-3 to select a disc. Then, press numbered buttons 0-9 and + 10 to program a track.**

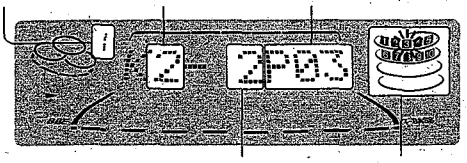
Reserved disc number Reserved track number



4 **Repeat step 3 to reserve other tracks.**

5 **Press ◄► to start play.**
After a track is played, it is cleared from the program.

Currently playing disc Disc number of the last reservation Number of remaining reserved tracks



Track number of the last reservation Currently playing track number flashes

To add a reservation during play
Repeat step 3.

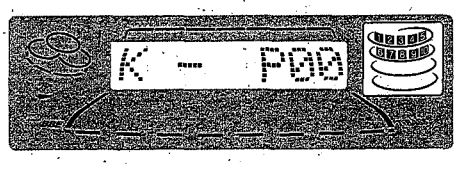
To check the reserved tracks
Press **CD EDIT/CHECK** repeatedly. Each time it is pressed, the disc number and track number are displayed in the reserved order.

- *__EDIT/CHECK__ on the remote control is also available instead of __CD EDIT/CHECK__ on the main unit. When using the remote control, press __EDIT/CHECK__ while pressing __SHIFT__.*

To stop play
Press ■.
When ◄► is pressed, the play starts from the last track again.

To skip a current track
Press ►►. The skipped track is cleared from the program.

To clear all the reservations
Press ►► repeatedly until "K - P00" is displayed.

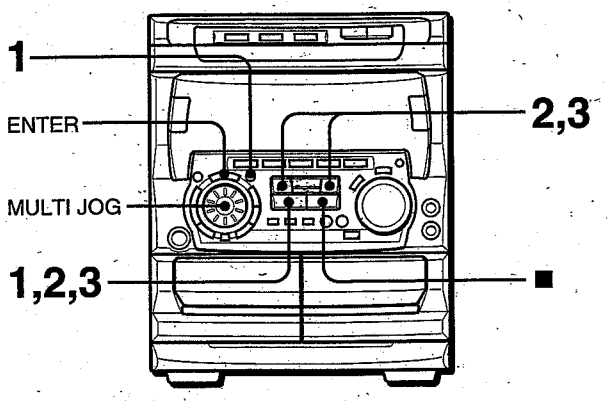


Press it once more to cancel the Karaoke programs. The display returns to that of CD play.

NOTE

- If the reserved track number does not exist on the selected disc, the unit stops playing and the display flashes. In this case, press ►► to skip the error track. Then press ◄► to start play with the next reserved track.
- When **PRGM** is pressed repeatedly in step 1, PRGM is displayed and the unit enters CD program play mode (page 16).
  To cancel program play, press ■ **CLEAR**.

SETTING THE CLOCK



1 Press CLOCK/TIMER once, then press II SET within 4 seconds.

When using the remote control
Press **CLOCK** while pressing **SHIFT**, then press **II SET** within 4 seconds.

2 Press ◄◄ DOWN or ►► UP to designate the hour, then press II SET.
The hour stops flashing and the minute starts flashing.

3 Press ◄◄ DOWN or ►► UP to designate the minute, then press II SET.
The minute stops flashing on the display and the clock starts from 00 seconds.

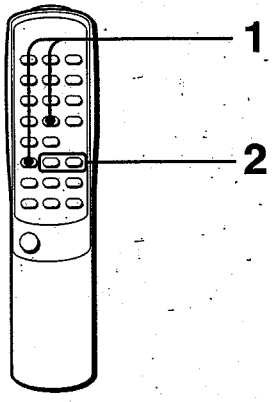
To display the current time
Press **CLOCK/TIMER**. The time is displayed for 4 seconds. However, the time cannot be displayed during recording.

To switch to the 24-hour standard
Press **CLOCK/TIMER** and then press ■ within 4 seconds. Repeat the same procedure to restore the 12-hour standard.

If the clock display flashes
This is caused by a power interruption. The current time needs to be reset.
If power is interrupted for more than approximately 24 hours, all settings stored in memory after purchase need to be reset.

** **MULTI JOG** is also available instead of ◄◄ and ►►.*
** **ENTER** is also available instead of **II SET**.*

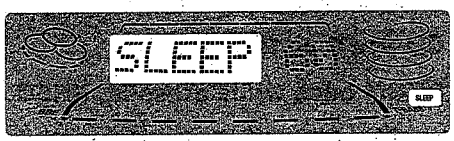
SETTING THE SLEEP TIMER



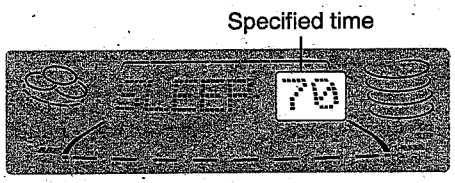
The unit can be turned off automatically at a specified time.

Use the remote control.

1 Press SLEEP while pressing SHIFT.



2 Within 4 seconds, press ◄◄ or ►► to specify the time until the power is turned off.
Each time the button is pressed, the time changes between 5 and 240 minutes in 5-minute steps.

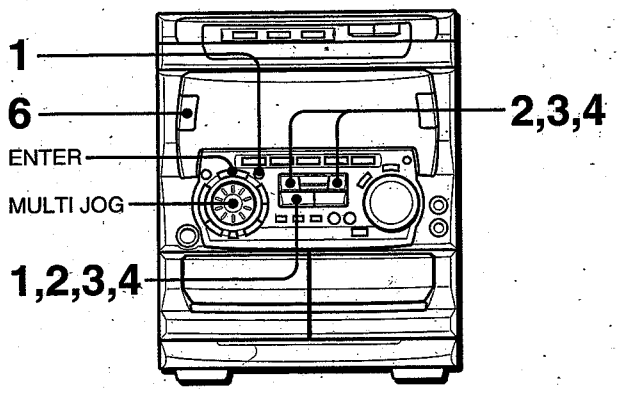


To check the time remaining until the power is turned off
Press **SLEEP** once while pressing **SHIFT**. The remaining time is displayed for 4 seconds.

To cancel the sleep timer
Press **SLEEP** twice while pressing **SHIFT** so that "SLEEP oFF" appears on the display.

** **MULTI JOG** is also available instead of ◄◄ and ►►.*

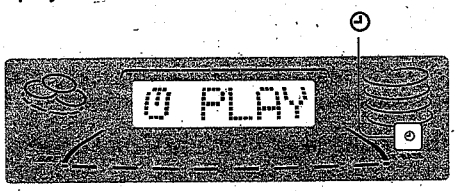
SETTING THE TIMER



The unit can be turned on at a specified time every day with the built-in timer.

Preparation
Make sure the clock is set correctly.

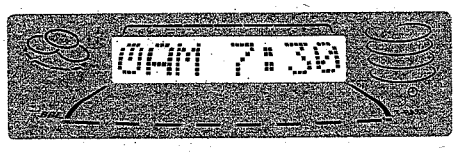
1 **Press CLOCK/TIMER repeatedly to display ◴, then press ❚❚ SET within 6 seconds.**
◴ is displayed and the hour flashes.



When using the remote control
Press **TIMER** while pressing **SHIFT**, then press **❚❚ SET** within 6 seconds.

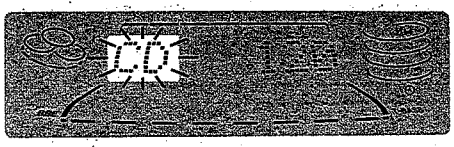
NOTE
If you press **❚❚ SET** after 6 seconds, another operation may start.

2 **Designate the hour of the timer-on time by pressing ◀◀ DOWN or ▶▶ UP, then press ❚❚ SET.**
Repeat to designate the minute of the timer-on time.

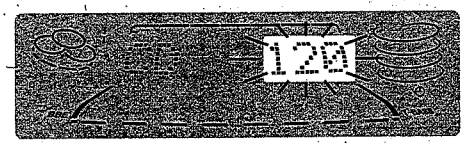


After you designate the timer-on time, one of the source names flashes on the display.

3 **Press ◀◀ DOWN or ▶▶ UP to select a source, then press ❚❚ SET.**
- If TUNER is selected, the band cannot be selected in this step.



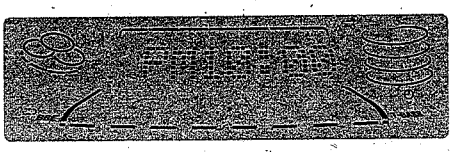
4 **Select the duration for the timer-activated period with ◀◀ DOWN or ▶▶ UP, then press ❚❚ SET.**



The duration for the timer-activated period can be set between 5 and 240 minutes in 5-minute steps.

5 **Prepare the source.**
To listen to a CD, load the CD to be played first on tray 1.
To listen to a tape, insert the tape into deck 1 or 2.
To listen to the radio, tune in to a station.

6 **Press POWER to turn the unit off after adjusting the volume and tone.**
◴ remains on the display after the power is turned off (timer standby mode).



When the timer-on time is reached, the unit turns on and begins play with the selected source.
The volume level is automatically set to 20 when the power is turned off with the volume level set to 21 or more.

To check the specified time and source
Press **CLOCK/TIMER** twice. The timer-on time, the selected source name and the duration for the timer-activated period are displayed for 4 seconds.

To cancel timer standby mode temporarily
Press **CLOCK/TIMER** repeatedly until ◴ or ◴REC disappears on the display.
To restore the timer standby mode, press **CLOCK/TIMER** repeatedly to display ◴ or ◴REC.

Using the unit while the timer is set
You can use the unit normally after setting the timer.
Before turning off the power, carry out step 5 to prepare the source, and adjust the volume and tone.

NOTE
- Timer playback and timer recording will not begin unless the power is turned off.
- Connected equipment cannot be turned on and off by the built-in timer of this unit. Use an external timer.

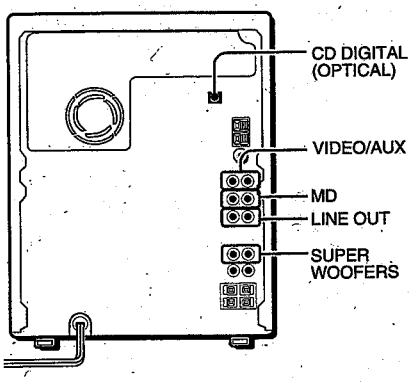
** **MULTI JOG** is also available instead of ◀◀ and ▶▶.*
** **ENTER** is also available instead of ❚❚ SET.*

TIMER RECORDING

Timer recording is applicable for TUNER and VIDEO/AUX (with an external timer) sources only.

Press CLOCK/TIMER repeatedly until ◴REC appears on the display, then press ❚❚ SET within 6 seconds. Carry out the steps of "SETTING THE TIMER" from step 2 and insert the tape to be recorded on into deck 2 after step 5.

CONNECTING OPTIONAL EQUIPMENT



Refer to the operating instructions of the connected equipment for details.
- The connecting cords are not supplied. Obtain the necessary connecting cords.
- Consult your local Aiwa dealer for optional equipment.

VIDEO/AUX JACKS

This unit can input analogue sound signals through these jacks. Use a cable with RCA phono plugs to connect audio equipment (turntables, LD players, MD players, VCRs, TV, etc.).
Connect the red plug to **VIDEO/AUX R** jack, and the white plug to **VIDEO/AUX L** jack.

When connecting a turntable
Use an Aiwa turntable equipped with a built-in equalizer amplifier.

MD JACKS

These jacks are recommended to connect with an MD player. Use a cable with RCA phono plugs.
Connect the red plug to **MD R** jack, and the white plug to **MD L** jack.

LINE OUT JACKS

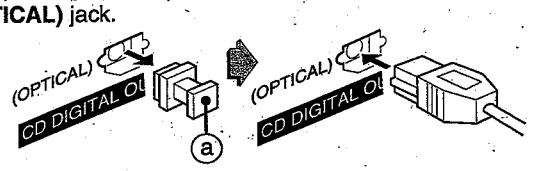
This unit can output analogue sound signal through these jacks. Use a cable with RCA phono plugs to connect audio equipment with **LINE IN** (analogue input) jacks.
Connect the red plug of a cable to **LINE OUT R** jack, and the white plug to **LINE OUT L** jack.

NOTE

Do not connect equipment to **LINE OUT** jacks and **VIDEO/AUX** jacks simultaneously. Otherwise, noise is generated and malfunction occurs.

CD DIGITAL OUT (OPTICAL) JACK

This unit can output CD digital sound signals through this jack. Use an optical cable to connect digital audio equipment (DAT deck, MD recorder, etc.).
Remove the dust cap ⓐ from **CD DIGITAL OUT (OPTICAL)** jack. Then, connect an optical cable plug to **CD DIGITAL OUT (OPTICAL)** jack.

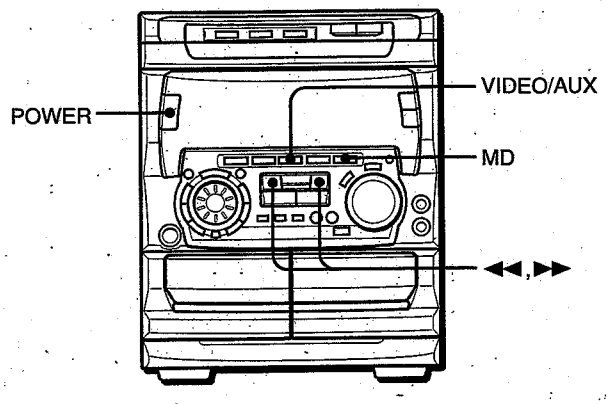


When the CD DIGITAL OUT (OPTICAL) jack is not being used
Attach the supplied dust cap.

SUPER WOOFERS JACKS

Connect optional powered sub woofer with built-in-amplifier to the jack.

LISTENING TO EXTERNAL SOURCES



To play equipment connected to **VIDEO/AUX** jacks or **MD** jacks proceed as follows.

1 Press VIDEO/AUX or MD.

To play the equipment connected to VIDEO/AUX, press **VIDEO/AUX**. "VIDEO" appears on the display.
To play the equipment connected to MD, press **MD**. "MD" appears on the display.

2 Play the connected equipment.

To change a source name in the display
When **VIDEO/AUX** is pressed, "VIDEO" is displayed initially. It can be changed to "AUX" or "TV".
With the power on, press **POWER** while pressing **VIDEO/AUX**. Repeat the procedure to select one of the names.

To adjust the sound level of the external source
When the sound level of the external source is much higher or much lower than that of other function sources, adjust it as follows.
1 Press **VIDEO/AUX** or **MD** and play the equipment.
2 Presss ◄◄ or ►► so that the sound level becomes the same as that of other function sources.

NOTE

During recording, the sound level can not be adjusted.

CARE AND MAINTENANCE

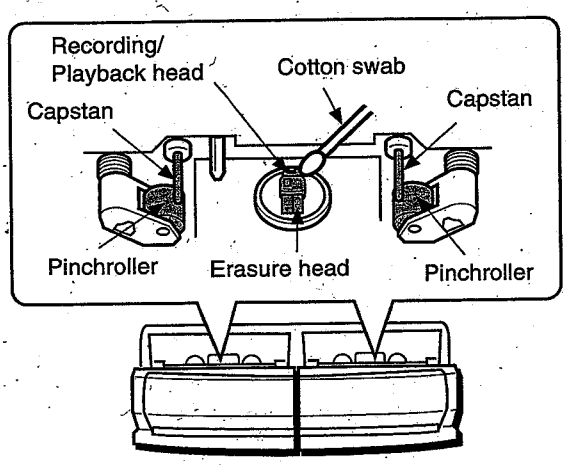
Occasional care and maintenance of the unit and the software are needed to optimize the performance of your unit.

To clean the cabinet

Use a soft and dry cloth.
If the surfaces are extremely dirty, use a soft cloth lightly moistened with mild detergent solution. Do not use strong solvents, such as alcohol, benzine or thinner as these could damage the finish of the unit.

To clean the heads and tape paths

After every 10 hours of use, clean the heads and tape paths with a head cleaning cassette or cotton swab moistened with cleaning fluid or denatured alcohol. (These cleaning kits are commercially available.)
When cleaning with a cotton swab, wipe the recording/playback head (deck 2 only), erasure head (deck 2 only), capstans, and pinchrollers.



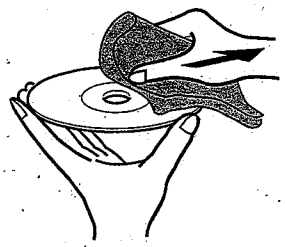
After cleaning the heads and tape paths with a liquid head cleaning cassette or a moistened swab, wait until the cleaned parts are completely dry before inserting the tapes.

To demagnetize the heads

The heads may become magnetized after long-term use. This may narrow the output range of recorded tapes and increase noise. After 20 to 30 hours use, demagnetize the heads with any commercially available demagnetizer.

Care of discs

- When a disc becomes dirty, wipe the disc from the centre out with a cleaning cloth.



- After playing a disc, store the disc in its case. Do not leave the disc in places that are hot or humid.

Care of tapes

- Store tapes in their cases after use.
- Do not leave tapes near magnets, motors, television sets, or any source of magnetism. This will downgrade the sound quality and cause noise.
- Do not expose tapes to direct sunlight, or leave them in a car parked in direct sunlight.

TROUBLESHOOTING GUIDE

If the unit fails to perform as described in these Operating Instructions, check the following guide.

GENERAL

There is no sound.
- Is the AC cord connected properly?
- Is there a bad connection? (→ page 3)
- There may be a short circuit in the speaker terminals.
  → Disconnect the AC cord, then correct the speaker connections.
- Was an incorrect function button pressed?

Sound is emitted from one speaker only.
- Is the other speaker disconnected?

The output sound is not stereo.
- Is the Karaoke function turned on? (→ page 21)

An erroneous display or a malfunction occurs.
→ Reset the unit as stated below.

TUNER SECTION

There is constant, wave-like static.
- Is the antenna connected properly? (→ page 3)
- Is the signal weak?
  → Connect an outdoor antenna.

The reception contains noise interferences or the sound is distorted.
- Is the system picking up external noise or multipath distortion?
  → Change the orientation of the antenna.
  → Move the unit away from other electrical appliances.

CASSETTE DECK SECTION

The tape does not run.
- Is deck 2 in pause mode? (→ page 13)

The sound is off-balance or not adequately high.
- Is the playback head dirty? (→ page 28)

Recording is not possible.
- Is the erasure prevention tab on the tape broken off? (→ page 14)
- Is the recording head dirty? (→ page 26)

Erasure is not possible.
- Is the erasure head dirty? (→ page 26)
- Is a metal tape being used?

High frequency sound is not emitted.
- Is the recording/playback head dirty? (→ page 26)
- Is a tape recorded without Dolby NR played back with the Dolby NR system operating? (→ page 14)

CD PLAYER SECTION

The CD player does not play.
- Is the disc correctly placed? (→ page 15)
- Is the disc dirty? (→ page 26)
- Is the lens affected by condensation?
  → Wait approximately one hour and try again.

To reset

If an unusual condition occurs in the display window or the cassette decks, reset the unit as follows.

1 Press **POWER** to turn off the power.
2 Press **POWER** to turn the power back on while pressing ■ **CLEAR**. Everything stored in memory after purchase is cancelled.

If the power cannot be turned off in step 1 because of a malfunction, reset by disconnecting the AC cord, and connect it again. Then carry out step 2.

SPECIFICATIONS

Main unit CX-NS707

FM tuner section

Tuning range	87.5 MHz to 108 MHz
Usable sensivity (IHF)	13.2 dBf
Antenna terminal	75 ohms (unbalanced)

MW tuner section

Tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna

LW tuner section

Tuning range	144 kHz to 290 kHz
Usable sensitivity	1400 µV/m
Antenna	Loop antenna

Amplifier section

Power output	Rated: 80 W + 80 W (6 ohms, T.H.D. 1 %, 1 kHz/DIN 45500) Reference: 100 W + 100 W (6 ohms, T.H.D. 10 %, 1 kHz/DIN 45324)
Total harmonic distortion	0.1 % (40 W, 1 kHz, 6 ohms, DIN AUDIO)
Inputs	VIDEO/AUX: 210 mV (adjustable) MD: 210 mV (adjustable) MIC 1, MIC 2: 1.4 mV (10 kohms)
Outputs	SUPER WOOFERS: 2.2 V LINE OUT: 280 mV SPEAKERS: accept speakers of 6 ohms or more SURROUND SPEAKERS: accept speakers of 8 ohms to 16 ohms PHONES (stereo jack): accepts headphones of 32 ohms or more

Cassette deck section

Track format	4 tracks, 2 channels stereo
Frequency response	CrO_2 tape: 50 Hz – 16000 Hz Normal tape: 50 Hz – 15000 Hz
Signal-to-noise ratio	60 dB (Dolby B NR ON, CrO_2 tape peak level)
Recording system	AC bias
Heads	Deck 1: Playback head × 1 Deck 2: Recording/playback head × 1, erase head × 1

Compact disc player section

Laser	Semiconductor laser (λ = 780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

General

Power requirements	230 V AC, 50 Hz
Power consumption	160 W
Dimensions of main unit (W × H × D)	260 × 324 × 348 mm
Weight of main unit	7.6 kg

Speaker system SX-ANS706

Cabinet type	4 way, bass reflex with surround speaker (magnetic shielded type)
Speakers	Woofer: 160 mm cone type Tweeter: 50 mm cone type Super tweeter: 20 mm ceramic type Cardioid speaker: 80 mm cone type Surround speaker: 60 mm cone type
Impedance	Front speaker: 6 ohms Surround speaker: 8 ohms
Output sound pressure level	87 dB/W/m
Dimensions (W × H × D)	250 × 330 × 293 mm
Weight	4.8 kg

Specifications and external appearance are subject to change without notice.

BBE SYSTEM
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DOLBY NR
Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
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Please check the laws on copyright relating to recordings from discs, radio or external tape for the country in which the machine is being used.

Principle of Aiwa's Front 180° Speaker System

Aiwa's Front 180° Speaker System provides excellent sound balance for true stereo reproduction from any listening angle.

In stereo sound reproductions systems up to now, the listening area where the optimal stereo effect is obtained has been extremely narrow. This is due to the following reasons.
As shown in Figure 2, a conventional stereo system has speakers on the front panel of the speaker system, pointing forward. It is designed for listening in a location directly in front of the front speaker panel.
In this case, as shown in Figure 2, a listener at point ⓐ, located on the centre line between the right and left speakers, hears the voice of a singer coming from the centre front. Instrumental sounds are distributed evenly between both speakers for an optimal stereo effect.
At point ⓑ, however, located off the centre line between the speakers, the distance from the left speaker to the listener is greater than the distance from the right speaker. Sound from the left speaker appears to be faint, and sound from the right speaker appears to be loud. Sound is perceived as coming from the speaker with the greater volume, so that the singer's voice appears to shift toward the right speaker. The normally balanced instrumental sounds also appear to come primarily from the right speaker.
Moreover, since the directivity of speakers increases with higher frequencies, high-frequency sounds from the left speaker become even harder to hear, increasing the impression of imbalance.
For these reasons, the listening area which provides even sound balance and the optimal stereo effect is limited to the narrow area shown in Figure 2-ⓐ.

To solve this problem, Aiwa has developed uni-directional speakers for this new speaker system featuring cardioid directivity for frequencies of 1 kHz or less. These speakers are pointed inward at angles of 45°. (see Figure 1). Driven by left and right stereo sound signals, these speakers act to increase the width of the optimum listening area (see Figure 3). Because of their cardioid directivity and the 45° angle of their main speaker axis, they provide enhanced sound reproduction at point ⓑ in Figure 3. The left speaker is pointed toward the listener, and the right speaker is pointed away from the listener, so that the directivity of the speakers compensates for the differences in perceived volume caused by the differences in distance to the listener. Therefore, the sound of a singer's voice is perceived as coming from a point midway between the speakers, and instrumental sounds are distributed evenly.

Figure 1 **Front 180° speaker system**

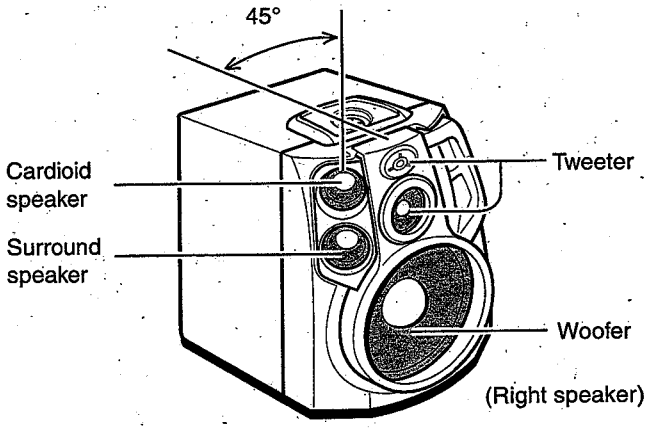
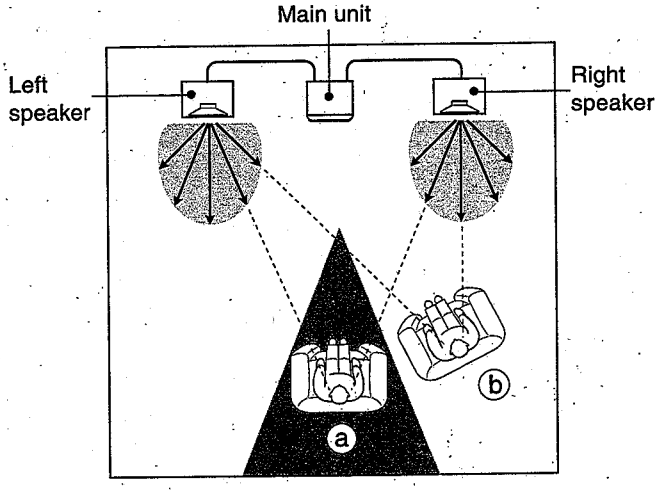


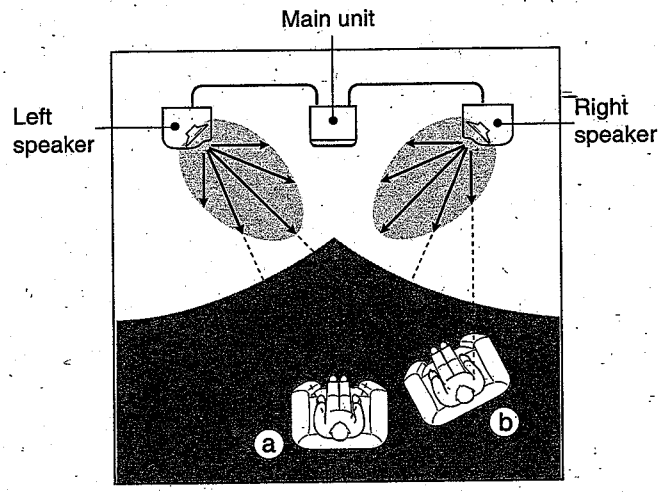
Figure 2 **Stereo effect with a conventional speaker system**



ⓐ Centre listening point: Balanced sound heard from left and right speakers
ⓑ Off-centre listening point: Right speaker sounds louder than left speaker
→: Sound pressure level
■: Stereo listening area

Figure 3 **Stereo effect with Aiwa Front 180° speaker system**

True stereo sound can be heard at point ⓑ as well as point ⓐ.



→: Sound pressure level
■: Stereo listening area of new speakers

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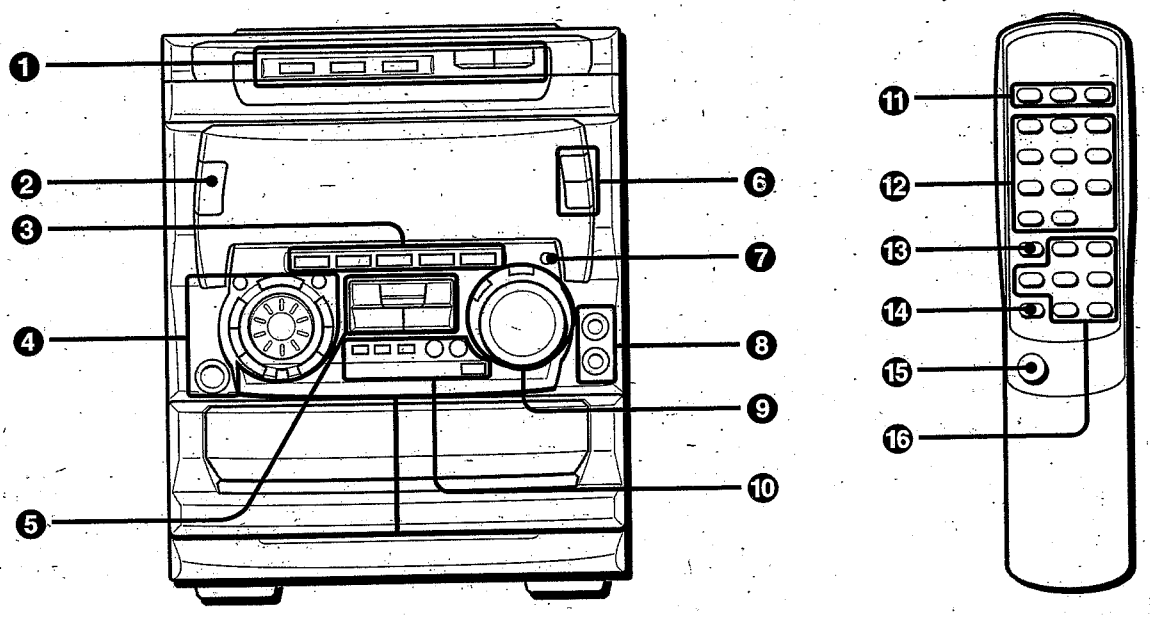

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9/CLOCK	23
0/MONO TUNER	11
+10/BAND	11,12
⓭ SHIFT	4
⓮ FUNCTION	4
⓯ POWER	5,25
⓰ ⏮/◀◀DOWN	11-13,15,16,19,20,23,24
▶▶⏭/▶▶UP	11-13,15,16,19,20,22-24
❚❚SET	12,13,15,23,24
■CLEAR	12-20,23
◀▶/▶PRESET	4,12-16
VOLUME(∧,∨)	6